



Title V Operating Permit

Permit No: **TV-OP-054**

Date Issued: **March 9, 2007; Administrative Amendment issued on December 17, 2007;**

Minor Modification issued on January 29, 2010

This certifies that:

Northeast Utilities

Public Service of New Hampshire

780 North Commercial Street

Manchester, NH 03101

has been granted a Title V Operating Permit for the following facility and location:

Public Service of New Hampshire

Newington Station

165 Gosling Road

Newington, NH

AFS Point Source Number – 3301500054

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V Operating Permit Application filed with the New Hampshire Department of Environmental Services on **July 1, 1996** under the signature of the following responsible official certifying to the best of their knowledge that the statements and information therein are true, accurate and complete.

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This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of the Code of Federal Regulations, Title 40, Part 70.

This Title V Operating Permit shall expire on **March 31, 2012**.

SEE ATTACHED SHEETS FOR ADDITIONAL PERMIT CONDITIONS

For the New Hampshire Department of Environmental Services, Air Resources Division

Director, Air Resources Division

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ABBREVIATIONS

AAL	Ambient Air Limit
AP-42	Compilation of Air Pollutant Emission Factors
ARD	Air Resources Division
ASTM	American Society for Testing and Materials
ATS	Allowance Tracking System
BACT	Best Available Control Technology
BHP (or bhp)	Brake Horse Power
BTU	British Thermal Units
CAA	Clean Air Act, 42 U.S.C. § 7401, et seq.
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstracts Service
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
COMS	Continuous Opacity Monitoring System
DER	Discrete Emission Reduction
Env-A	New Hampshire Code of Administrative Rules – Air Resources Division
Env-Wm	New Hampshire Code of Administrative Rules – Waste Management Division
ECS	Emission Control System
ERC	Emission Reduction Credit
ETS	Emissions Tracking System
FR	Federal Register
HAP	Hazardous Air Pollutant
HHV	High Heat Value
HCl	Hydrochloric acid
Hr	Hour
kGal	1,000 gallons
kscfm	1,000 standard cubic feet per minute
KVDC	Kilovolt Direct Current
KW	Kilowatt
LAER	Lowest Achievable Emission Rate
Lb/hr	Pounds per hour
LNB	Low NO _x Burner
LNG	Liquid Natural Gas
LPG	Liquid Petroleum Gas (Propane)
MACT	Maximum Achievable Control Technology
mg/L	Milligrams per liter
MMBTU (or MMBtu)	Million British Thermal Units
MMCF	Million Cubic Feet
MW	Megawatt
NAAQS	National Ambient Air Quality Standard
NATS	NO _x Allowance Tracking System
NESHAPs	National Emissions Standards for Hazardous Air Pollutants

ABBREVIATIONS (cont.)

NG	Natural Gas
NHDES (or DES)	New Hampshire Department of Environmental Services
NMOC	Nonmethane Organic Compound
NO _x	Oxides of Nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PCB	Polychlorinated biphenyls
PE	Potential Emission
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 microns diameter
ppm	part per million
ppmv	part per million by volume
PSD	Prevention of Significant Deterioration
PSI	Pounds per Square Inch
PTE	Potential to Emit
PUC	Public Utilities Commission
RACT	Reasonably Available Control Technology
RTAP	Regulated Toxic Air Pollutant
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
T-12M	Tons during any consecutive 12-month period
TAP	Toxic Air Pollutant
TSP	Total Suspended Particulate Matter
TPY	Tons per Year
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

Facility Specific Title V Operating Permit Conditions

I. Facility Description of Operations

Newington Station (Newington) is a fossil fuel-fired electric generating facility, owned and operated by Public Service of New Hampshire (PSNH), a subsidiary of Northeast Utilities. The facility is comprised of one utility boiler, two auxiliary boilers, one emergency generator, two bulk oil storage tanks, and one bulk oil storage day tank. The facility operations also include various activities that are classified as insignificant or exempt activities.

The one utility boiler is capable of burning either natural gas or No. 6 fuel oil or crude oil; the auxiliary boilers burn No. 2 fuel oil; and the emergency generator burns diesel.

The auxiliary boilers provide steam and building heat when the utility boiler is not operating. The utility boiler stack is equipped with a CEMS for NO_x, SO₂, and CO and a COMS. Newington emits NO_x, SO₂, CO, VOCs, PM, CO₂, RTAPs, and HAPs. Newington has installed control equipment and implemented operational changes to reduce emissions, including electrostatic precipitators to control particulate matter, and burner modifications (also referred to as low NO_x burners), overfire air, staged combustion, and water injection, to control NO_x emissions.

Newington operates a fly ash reinjection system, as an alternative operating scenario, to capture unburned carbon and to reduce the amount of fly ash shipped off-site as solid waste.

II. Permitted Activities

In accordance with all of the applicable requirements identified in this permit, the Permittee is authorized to operate the devices and or processes identified in Sections III, IV, V and VI within the terms and conditions specified in this Permit.

III. Significant Activities Identification and Stack Criteria

A. Significant Activity Identification

The activities identified in the following table (Table 1) are subject to and regulated by this Title V Operating Permit:

Table 1 – Significant Activity Identification			
Emission Unit Number	Description of Emission Unit	Maximum Gross Heat Input or Maximum Power Output	Maximum Operating Conditions
NT1	Steam Generating Unit 1 (Combustion Engineering Model No. 8269) (Installed 1969) Tangential Firing	Crude oil or No. 6 fuel oil at no more than 2.0% sulfur content by weight, No. 2 fuel oil at no more than 0.4% sulfur content by weight, or natural gas or combination thereof: 4,350 MMBtu/hr gross heat input (nameplate rating) ¹	A) In accordance with New Source Review avoidance, the maximum operating rate shall not exceed 25,235,000 MMBtu total gross heat input during any consecutive 12-month period. This maximum

¹ The heat input rating of 4,350 MMBtu/hr was calculated based upon the nameplate rating of NT1, fuel flow to the boiler, and Btu

Table 1 – Significant Activity Identification

Emission Unit Number	Description of Emission Unit	Maximum Gross Heat Input or Maximum Power Output	Maximum Operating Conditions
			operating rate may be adjusted upon written approval from DES. B) Toner may be used as an auxiliary fuel in the boiler. The toner feed rate shall not exceed 24 tons/day.
NTAB1	Auxiliary Boiler No. 1A (Erie City Energy Division Model No. 15Mkeystone) (Installed 1969)	No. 2 Fuel Oil with maximum sulfur content of 0.4% by weight: 99.4 MMBtu/hr	A) Maximum fuel consumption rate of No. 2 fuel oil shall not exceed 3.57 million gallons during any consecutive 12-month period. ² B) This fuel consumption limitation is to limit the NOx emissions to less than 50 tons during any consecutive 12-month period.
NTAB2	Auxiliary Boiler No. 1B (Erie City Energy Division, Model No. 15Mkeystone) (Installed 1969)	No. 2 Fuel Oil with maximum sulfur content of 0.4% by weight: 99.4 MMBtu/hr	A) Maximum fuel consumption rate of No. 2 fuel oil shall not exceed 3.57 million gallons during any consecutive 12-month period. ³ B) This fuel consumption limitation is to limit the NOx emissions to less than 50 tons during any consecutive 12-month period.
NTEG1	Emergency Generator 1 Caterpillar Model # C9 Serial # - S9L01463 Installed December 2007	2.7 MMBtu/hr Diesel ⁴ - equivalent to 19.4 gal/hr	Operating hours shall be limited to 500 hours during any consecutive 12-month period.

B. Stack Criteria

The following stacks for the above listed significant devices at this facility shall discharge vertically without obstruction (including rain caps) and meet the following criteria:

analysis of the fuel. The CEMS calculates and records the heat input on a minute-by-minute basis according to the procedures in 40 CFR 75. The calculated heat input from the CEMS is based upon the volumetric flow of the stack gases, the CO₂ concentration, and a carbon-based F factor—a default factor provided in 40 CFR Part 75. The calculated heat input rate from the CEMS is not based on fuel flow, except when dual fuels are used.

² The heating value of No. 2 fuel oil is assumed to be 140,000 BTU/gallon. The fuel consumption limits may vary based on the actual heat content of the fuel burned.

³ The heating value of No. 2 fuel oil is assumed to be 140,000 BTU/gallon. The fuel consumption limits may vary based on the actual heat content of the fuel burned.

⁴ The heating value of diesel is assumed to be 137,000 BTU/gallon. The fuel consumption limits may vary based on the actual heat content of the fuel burned.

Table 2 – Stack Criteria				
Stack Number	Emission Unit Number	Emission Unit Description	Minimum Stack Height (Feet) Above Ground Level	Maximum Inside Stack Diameter (Feet)
STNT1	NT1	Steam Generating Unit No. 1	410	20.75
STNTAB1	NTAB1	Auxiliary Boiler No. 1	211	3.5
STNTAB2	NTAB2	Auxiliary Boiler No. 2	211	3.5

Changes to the state-only requirements pertaining to stack parameters (set forth in this permit), shall be permitted only when an air quality impact analysis which meets the criteria of Env-A 606 is performed either by the facility or the New Hampshire Department of Environmental Services, Air Resources Division (if requested by facility in writing) in accordance with the “DES-ARD Procedure for Air Quality Impact Modeling” and approved by DES. All air modeling data shall be kept on file at the facility for review by the DES upon request.

IV. Insignificant Activities Identification

All activities at this facility that meet the criteria identified in Env-A 609.04(d), shall be considered insignificant activities. Emissions from the insignificant activities shall be included in the total facility emissions for the emission-based fee calculation described in Section XXIII. of this Permit.

V. Exempt Activities Identification

All activities identified in Env-A 609.03(c) shall be considered exempt activities and shall not be included in the total facility emissions for the emission based fee calculation described in Section XXIII of this permit.

VI. Pollution Control Equipment/Method Identification

The devices and/or processes identified in Table 3 are considered pollution control equipment or techniques for each identified emissions unit:

Table 3 – Pollution Control Equipment Method Identification ⁵		
Pollution Control Equipment Number	Description of Equipment/Method	Emission Unit Number
NT1-PC1	Electrostatic Precipitator (ESP)	NT1

⁵ Note that additional pollution control equipment/method options are included in the alternative operating scenario section.

VII. Alternative Operating Scenarios

While operating under an alternative operating scenario, the Permittee shall comply with all applicable requirements specified in this permit, including, but not limited to, state and federal operational and emission limitations specified in Section VIII.A.through G, monitoring and testing requirements specified in Section VIII. H., recordkeeping requirements specified in Section VIII. I, and reporting requirements specified in Section VIII. J. Pursuant to 40 CFR 70.6 (a)(9), the Permittee shall keep all applicable records pertaining to the alternative operating scenario during such operation. The Permittee shall keep a record of the scenario under which it is operating.

A. Trial Test Burns with Other Fuels (Permit to Operate No. PO-B-1030)

Prior to the use of any fuel other than fuels previously reviewed and approved by the DES, PSNH shall submit a proposal to the DES, which shall include, but not be limited to the following:

1. Type of fuel;
2. Analysis data of the fuel proposed, which shall include proximate and ultimate analysis, volatile and semi-volatile analyses (i.e., EPA Method 8240, 8260, 8250, or 8270) and metals analysis (i.e., Method 3050 and mercury).
3. Specification of baseline operating conditions at Newington Station including fuel feed rate, sulfur content of fuel, ESP operating conditions, and emission values of opacity, SO₂, NO_x, particulate, and CO (if applicable);
4. A comprehensive test plan, which shall present the proposed operating conditions for the trial burn, to include but not be limited to the following:
 - a) Length of fuel trial;
 - b) New fuel rate;
 - c) Means of measuring new fuel feed;
 - d) Description of new fuel feed process;
 - e) New fuel preparations;
 - f) Percent moisture of new fuel feed;
 - g) Sulfur content of new fuel;
 - h) Time table for operation stability;
 - i) Existing fuel feed rate;
 - j) ESP operating conditions;
 - k) Expected emission values of opacity, SO₂, NO_x, TSP, and CO;

- l) The continuous tracking or operational data prior to the fuel trial, during the fuel trial, and for a short time after the fuel trial. SO₂, NO_x, and opacity can be monitored using the existing CEM.
 - m) A compliance stack test protocol for TSP emissions using Method 1 through 4, Method 5, or a DES approved alternate, when requested by DES.
 - n) Operational parameters to be monitored and recorded, which shall include, but not be limited to steam flows, boiler temperatures, and oxygen;
 - o) The effects of the new fuel on flyash characteristics and resulting effect on the ESP operation;
 - p) The effects of the new fuel on bottom ash characteristics;
 - q) Specification and description of expected operational and combustion conditions when the trial burn has reached stabilization with the new fuel feed; and
 - r) A timetable or schedule with approximate dates of the trial test burn.
5. Based on information regarding the proposed trial fuel burn provided by PSNH, DES may request additional specific information on the proposed trial burn operations. In addition, metal emission stack testing may be required dependent upon DES review of the new fuel metal analysis.
6. If the new fuel is to be consumed on a regular basis, PSNH must apply for a temporary permit. As part of the temporary permit review process, DES will make a determination as to the applicability of the New Source Review and Prevention of Significant Deterioration programs, and will provide an opportunity for public notice and comment.
7. DES shall respond within 30 days of receipt of a proposal with approval, conditional approval, denial, or request for additional information.
8. DES Waste Management Division may have additional requirements and concerns and shall be contacted by PSNH prior to the initiation of any trial fuel burn.
9. A summary report shall be submitted to DES within 60 days after the end of the trial fuel burn, which should include a summary of operational results and trends, emission values to include CEM and stack test data, if performed, and proposed future use of fuel.

B. Fuel Blending Requirements (State Enforceable Only) (Permit to Operate No. PO-B-1030)

DES grants PSNH a waiver from Env-A 1604 in order to purchase oil containing sulfur greater than 2.0% by weight. This oil shall be used for blending purposes only. PSNH shall comply with the requirements listed below when purchasing oil greater than 2.0% sulfur.

- 1. Delivery of greater than 2.0% sulfur oil shall be to segregated storage tanks.

2. Greater than 2.0% sulfur oil shall be mixed with less than 2.0% sulfur oil in a tank in which the “sparging system” shall be in full operation to assure complete mixing of the blended oil.
3. After mixing for an appropriate amount of time to assure complete blending, samples from the top, middle, and bottom of the tank shall be collected and analyzed in accordance with method ASTM D 4294. The sample results shall be averaged to create a composite figure in accordance with PSNH procedures.
4. After sampling is complete and the test results indicate that the tank of blended oil is less than 2.0% sulfur by weight, the oil may be transferred to the Newington day tank.
5. PSNH shall not burn oil containing greater than 2.0% sulfur by weight.
6. Prior to accepting any shipment of oil containing greater than 2.0% sulfur by weight, PSNH shall contact DES by fax or telephone.
7. PSNH shall provide DES with all analytical data from samples collected from all blending operations that utilize greater than 2.0% sulfur by weight oil. This data shall provide DES with specific sulfur analysis information on the oil feeding the boilers and confirm that each blend is less than or equal to 2.0% sulfur by weight.

C. Fly Ash Reinjection (Permit to Operate No. PO-B-1030)

1. To capture unburned carbon in the fly ash and to reduce the amount of ash shipped off-site as solid waste, PSNH is authorized to maintain and operate the fly ash injection system.
2. The fly ash injection system is comprised of a system of blowers and piping that allow fly ash from the precipitator hoppers to be reinjected into the burners of the boilers.
3. To minimize PM emissions during fly ash reinjection, PSNH shall ensure that the ESP is energized before start-up of the fly ash reinjection system.

D. NOx Emission Reduction Management Practices (Permit to Operate No. PO-B-1030, NOx RACT Orders Nos. ARD-97-001 and ARD-98-001, and Env-A 1211)

1. To achieve the NOx emission requirements specified in this permit, PSNH is authorized to maintain and operate any or all of following equipment, systems and methods: the overfire air system, water injection, and the low NOx burners.
2. The CEMS shall be used to determine the NOx emissions from Unit No. 1.
3. The overfire air system is comprised of ports, ducts, and dampers that allows the combustion airflow to be diverted from the top of the windbox through ports located above the top elevation of burners.
4. The water injection system is comprised of nozzles that inject water into the flame to reduce peak flame temperature.

5. The low NO_x burners are designed to create lower NO_x emissions during the combustion of fuel.
6. PSNH shall maintain compliance with the NO_x emission limitations listed in Section VIII. B, D, E, and F during the usage of any of these alternative NO_x emission reduction methods.
7. PSNH shall record which NO_x emission reduction management practice is in use and when a change in scenario occurs.
8. PSNH shall maintain records according to Section VIII. I and submit reports according to Section VIII. J.

E. Auxiliary Fuel – Toner (Permit to Operate No. PO-B-1030) (State Enforceable)

Toner may be used as an auxiliary fuel. The combustion of the toner shall be performed under the following conditions:

1. The toner feed rate shall not exceed 24 tons/day or a rate to ensure compliance with Env-A 1400, whichever is less.
2. PSNH shall ensure compliance with all federal and state air quality and waste management requirements pertaining to the combustion of toner.
3. Combustion of toner shall not occur during start-up or shutdown conditions.
4. Combustion of toner shall be ceased immediately upon indication of abnormal operating conditions or any condition that threatens compliance with this permit or any air quality regulation or requirement.
5. The toner shall be stored in containers with proper fire precautions observed.
6. The toner shall be handled and transferred in such a manner as to minimize fugitive dust emissions.
7. PSNH shall retain on-site the following information:
 - a) Name and address of the company providing the toner;
 - b) Amount of toner combusted; and
 - c) RTAP compliance demonstration.
8. When a new toner is combusted, PSNH shall notify DES in the semi-annual reporting.
9. PSNH shall conduct an RTAP evaluation to determine compliance for each new toner and retain it along with a copy of the Material Safety Data Sheet (MSDS) on-site for inspection by DES, upon request.

VIII. Applicable Requirements

A. State-only Enforceable Operational and Emission Limitations

The Permittee shall be subject to the state-only operational and emission limitations identified in Table 4 below.

Table 4 – State-Only Enforceable Operational and Emission Limitations			
Item No.	Regulatory Cite	Applicable Emission Unit	Applicable Requirement
1.	Env-A 1403	All devices subject to RSA 125-I and Env-A 1400	All devices or processes subject to RSA 125-I and Env-A 1400 shall comply with Env-A 1400 (<i>Regulated Toxic Air Pollutants</i>).
2.	Env-A 1403.01(d)	All devices subject to RSA 125-I and Env-A 1400	Documentation for the demonstration of compliance shall be retained at the facility and shall be made available to DES for inspection upon request.
3.	Env-A 1404.01	All devices subject to RSA 125-I and Env-A 1400	A) The owner of a new or modified device or process requiring a permit under this chapter shall submit an application for a temporary permit in accordance with Env-A 607.03. B) Pursuant to RSA 125-I:5,I, the owner shall not operate the device or process until a temporary permit is issued.
4.	Env-A 1405.01	All devices subject to RSA 125-I and Env-A 1400	The owner of any device or process subject to RSA 125-I and Env-A 1400 shall determine compliance with the AAL by using one of the methods provided in Env-A 1405. Upon request, the owner of any device or process subject to RSA 125-I and Env-A 1400 shall provide documentation of compliance with the AAL to DES.
5.	Env-A 1605.01 Sulfur Content for Gaseous Fuels ⁶	NT1	The sulfur content of gaseous fuels shall not exceed 15 grains of sulfur per 100 cubic feet of gas at standard temperature and pressure.

B. Federally Enforceable Operational and Emission Limitations

1. The Permittee shall be subject to the emission limitations summarized in Table 5 below for the listed fuel burning devices.

⁶ Env-A 1605 contains the most current requirement for the sulfur content of gaseous fuels. Env-A 1605 is state enforceable only because it is not included in New Hampshire's State Implementation Plan (SIP). 40 CFR 52.1520 contains the New Hampshire rules that have been approved by EPA and adopted as part of the SIP. Env-A 402.03, effective on December 27, 1990, lists the federally enforceable sulfur limit for gaseous fuels because it was adopted as part of the SIP on September 14, 1992. Upon approval by EPA and adoption into New Hampshire's SIP, Env-A 1605 will supercede Env-A 402.03, which will expire.

Table 5 – Summary of Emission Limitations				
Item No.	Pollutant	NT1	NTAB1	NTAB2
1.	SO ₂ Emissions Cap for Schiller Station, Merrimack Station and Newington Station combined	55,150 tons per calendar year	NA	NA
2.	NO _x	0.35 lb/MMBtu based on a 24-hour calendar day average with oil ⁷ ; 0.25 lb/MMBtu based on a 24-hour calendar day average with oil/gas	0.20 lb/MMBtu based on a 24-hour calendar day average; 50 tons per consecutive 12-month period	0.20 lb/MMBtu based on a 24-hour calendar day average; 50 tons per consecutive 12-month period
3.	CO	0.231 lb/MMBtu based on a 24-hour calendar day average; 2915 tons per consecutive 12-month period	NA	NA
4.	TSP	0.22 lb/MMBtu	0.41 lb/MMBtu	0.41 lb/MMBtu
5.	Opacity	40% for any continuous 6-minute period	40% for any continuous 6-minute period	40% for any continuous 6-minute period

2. The Permittee shall be subject to the federally enforceable operational and emission limitations identified in Table 6 below:

Table 6 – Federally Enforceable Operational and Emission Limitations			
Item No.	Regulatory Cite	Applicable Emission Unit	Applicable Requirement
1.	Env-A 1211.03(c)(3)(c) NO _x RACT for Utility Boilers	NT1	<p>A) When firing oil, the Permittee shall be limited to 0.35 lb NO_x/MMBtu, based on a 24-hour calendar day average⁸.</p> <p>B) When firing gas or any combination of oil and gas, the Permittee shall be limited to 0.25 lb NO_x/MMBtu heat input based on a 24-hour calendar day average.</p> <p>C) If both a combination of gas and oil and exclusively oil are burned for separate periods within the same 24-hour calendar day, the applicable emission limit shall be a prorated value using the emission limits specified in Conditions B and C above and the actual hour that each</p>

⁷ Note that 0.35 lb/MMBtu based on a 24-hour calendar day average is equivalent to 4,416.1 tons per consecutive 12-month period based on an annual heat input of 25,235,000 MMBtu and 0.35 lb/MMBtu.

⁸ Note that 0.35 lb/MMBtu based on a 24-hour calendar day average is equivalent to 4,416.1 tons per consecutive 12-month period based on an annual heat input of 25,235,000 MMBtu and 0.35 lb/MMBtu

Table 6 – Federally Enforceable Operational and Emission Limitations

Item No.	Regulatory Cite	Applicable Emission Unit	Applicable Requirement
			<p>fuel type is burned as indicated in the following equation:</p> $AEL = \frac{(t_{og} * 0.25lb / MMBtu) + (t_o * 0.35lb / MMBtu)}{t_{og} + t_o}$ <p>Where: AEL=allowable NOx emission limit (in lb/MMBtu) t_{og}=Number of hours within 24-hour calendar day when burning any combination of gas and oil t_o=Number of hours within 24-hour calendar day when burning exclusively oil</p>
2.	State Permit to Operate No. PO-B-1030 and Env-A 1604.01(c)(2) Fuel Specifications for No. 6 Fuel Oil and Crude Oil	NT1	The sulfur content of No. 6 fuel oil and crude oil shall not exceed 2.00 percent sulfur by weight.
3.	State Permits to Operate Nos. PO-B-1030, PO-B-1031, PO-B-1032 and Env-A 1604.01(a) Fuel Specifications for No. 2 Fuel Oil	NT1, NTAB1, NTAB2	The sulfur content of No. 2 fuel oil shall not exceed 0.40 percent by weight.
4.	40 CFR 52.1520 ⁹ Sulfur Content for Gaseous Fuels	NT1, NTAB1, NTAB2	The sulfur content of gaseous fuels shall not exceed 5 grains of sulfur per 100 cubic feet of gas at standard temperature and pressure.
5.	State Permit to Operate No. PO-B-1030	NT1	PSNH shall use No. 2 fuel oil or natural gas to start-up the boiler.
6.	State Permit to Operate No. PO-B-1030 Maximum Gross Heat Input	NT1	A) The maximum operating rate of this electric generating unit is limited to 4,350 MMBtu/hr (nameplate rating) ¹⁰ gross heat input of crude oil or No. 6 fuel oil at not more than 2.0% sulfur content by weight, No. 2 fuel oil at not more than 0.4% sulfur content by weight or natural gas or any combination thereof.

⁹ 40 CFR 52.1520 contains the New Hampshire rules that have been approved by EPA and adopted as part of the State Implementation Plan (SIP). Env-A 402.03, effective on December 27, 1990, contained the sulfur limit for gaseous fuels was adopted as part of the SIP on September 14, 1992. Env-A 402.03 and is still considered to be federally enforceable until such time as the SIP is amended and approved by the EPA. This requirement will expire at such time that Env-A 1605, the amended rule containing the sulfur content limit for gaseous fuels, is approved by EPA and adopted as part of the SIP.

¹⁰ The heat input rating of 4,350 MMBtu/hr was calculated based upon the nameplate rating of NT1, fuel flow to the boiler, and Btu analysis of the fuel. The CEMS calculates and records the heat input on a minute-by-minute basis according to the procedures in 40 CFR 75. The calculated heat input from the CEMS is based upon the volumetric flow of the stack gases, the CO₂ concentration, and a carbon-based F factor—a default factor provided in 40 CFR Part 75. The calculated heat input rate from the CEMS is not based on fuel flow.

Table 6 – Federally Enforceable Operational and Emission Limitations

Item No.	Regulatory Cite	Applicable Emission Unit	Applicable Requirement
			B) In accordance with NSR avoidance for CO, the maximum operating rate shall not exceed 25,235,000 MMBtu total gross heat input during any consecutive 12-month period. Upon written approval from DES, PSNH may adjust the maximum operating rate provided that PSNH would not exceed the emission limitations established in the permit.
7.	State Permit to Operate No. PO-B-1030 and Env-A 404.01 State Acid Deposition Control Program	NT1	The total SO ₂ emissions from Newington Station's Unit No. 1 (NT1), Schiller Station, and Merrimack Station shall not exceed 55,150 tons per calendar year.
8.	State Permits to Operate Nos. PO-B-1030 and Env-A 2002.01 and 2002.04 (b) Visible Emission Standard for Fuel Burning Devices	NT1	During normal operation, the average opacity shall not exceed 40 percent for any continuous 6-minute period. The 6-minute time blocks shall be established to provide for ten 6-minute blocks per calendar hour. The first 6-minute time block in any calendar hour in excess of the opacity standard will not be considered an excess emission. Any subsequent time block in the same calendar hour in exceedance of the opacity standard shall be considered an excess emission. To be considered an excess emission, the subsequent time block in the same calendar hour in excess of the opacity standard does not have to be consecutive in occurrence with the first exceedance. The average opacity may exceed 40 percent for a non-overlapping set or sets of time up to 60 minutes in any 8-hour period during startup, shutdown, malfunction, soot blowing, grate cleaning, and cleaning of fires.
9.	State Permits to Operate Nos. PO-B-1031, PO-B-1032 and Env-A 2002.01 and 2002.04 (c) Visible Emission Standard for Fuel Burning Devices	NTAB1, NTAB2	The average opacity shall not exceed 40 percent for any continuous 6-minute period. The average opacity may exceed 40 percent for one period of 6 continuous minutes in any 60 minute period during startup, shutdown, malfunction, soot blowing, grate cleaning, and cleaning of fires.
10.	State Permit to Operate No. PO-B-1030, and Env-A 2002.06(c)(2) Particulate Emission Standards	NT1	<p>PSNH shall not cause or allow emissions of particulate matter in excess of the following equation at the utility boiler:</p> $E = 0.880 * I^{-0.166}$ <p>Where: E=maximum allowable particulate matter emission rate in lb/MMBtu = 0.22 lb/MMBtu I=maximum gross heat input rate in MMBtu/hr = 4,350 MMBtu/hr</p> <p>This limitation is independent of fuel type and applies at all times, including during flyash reinjection.</p>
11.	State Permit to Operate PO-B-1030	NT1	A) PSNH shall not exceed a CO emission rate of 0.231 lb/MMBtu for any 24-hour calendar day average as calculated by the CEMs. This limitation is independent of fuel type and applies at all times.

Table 6 – Federally Enforceable Operational and Emission Limitations

Item No.	Regulatory Cite	Applicable Emission Unit	Applicable Requirement
			B) PSNH shall not exceed an annual CO emission rate of 2,915 tons per consecutive 12-month period based upon 0.231 lb/MMBtu and the New Source Review limited maximum annual operating rate of 25,235,000 MMBtu/year. As long as the daily and annual CO emission rates are not exceeded, the maximum annual operating rate is not a permit limitation.
12.	State Permit to Operate No. PO-B-1030 ESP Operating Requirements	NT1	<p>A) PSNH shall maintain and operate the ESP system for the control of particulate matter, in accordance with the manufacturer's recommendations.</p> <p>B) The ESP unit shall be operational at all times that the facility is in operation above 120 MW on any combination of oil and oil/gas. The ESP will not normally be energized when the unit is burning 100 percent natural gas.</p> <p>C) The inlet temperature of the ESP as measured at the outlet of the boiler shall not exceed 785°F.</p> <p>D) The secondary voltage of the transformer rectifier sets (TR sets) is automatically controlled to operate between a maximum of 45 KVDC and a minimum of 7500 VDC based on the dust loading rate, spark rate, and opacity.</p> <p>E) PSNH shall optimize the ESP based on the opacity baseline for high load service.</p> <p>F) PSNH shall track the fields out of service.</p> <p>G) PSNH shall continuously operate and maintain the ESP system to minimize particulate matter emissions, to meet permit conditions, and to maintain compliance with Env-A 2000. The operation and maintenance shall include the normal procedures for scheduled checking and cleaning of the hoppers and transport lines. All maintenance procedures performed and corrective actions taken on the ESP system shall be recorded. The records shall be maintained at the facility and shall be made available for review at the request of the DES. All deviations from the operation criteria described above and the corrective actions taken shall be recorded in the work management system or logbook.</p>
13.	State Permit to Operate PO-B-1030 New Source Review Avoidance	NT1	<p>A) PSNH avoided NSR when adding the natural gas firing capabilities on the basis that the emissions would not increase.</p> <p>B) If an emissions increase occurs in the maximum 24-hour calendar day average emission rate (calculated in lb/MMBtu) of any pollutant as determined in accordance with 40 CFR 60.14 and by DES when burning natural gas, then the natural gas conversion shall be subject to NSPS.</p> <p>C) If an emissions increase occurs in the actual annual emissions of any pollutant as determined in accordance with 40 CFR 51.165, 40 CFR 52.21 or by DES, then the natural gas conversion shall be subject to NSR.</p> <p>D) PSNH shall not exceed the 24-hour calendar day average emission rates of CO (0.231 lb/MMBtu) and NO_x (0.25 lb/MMBtu for oil/gas and 0.35 for oil) as specified above. The maximum annual operating rate of 25,235,000 MMBtu/year was used to calculate the applicable CO emission permit limits, which will be enforced through the annual CO</p>

Table 6 – Federally Enforceable Operational and Emission Limitations

Item No.	Regulatory Cite	Applicable Emission Unit	Applicable Requirement
			<p>emission limit by DES to protect the annual baseline emission limits for CO. The maximum annual operating rate referred to herein may be adjusted by PSNH provided that the resulting emissions will not contribute significantly to or cause a violation of any applicable NAAQS, or a violation of any applicable PSD increment, or a violation of the NH State Implementation Plan, or a violation of any condition contained in a permit issued pursuant to regulations approved or promulgated under the CAA. Regardless of the maximum annual operating rate, the emission limitations established in this permit shall not be exceeded.</p> <p>E) Any adjustments, requested by PSNH, to the maximum NO_x and CO emission limits and the maximum operating rate referred to herein will be made only after DES' review of applicable supporting data. Any adjustments made shall not result in an increase of emissions. Adjustments shall not be made until PSNH has received written approval from DES.</p>
14.	State Permit to Operate PO-B-1030	NT1	PSNH shall follow standard operating procedures for cold boiler start-up and boiler repair practices to ensure compliance with opacity standards.
15.	40 CFR 72, 73, and 77 Acid Rain Provisions	NT1	PSNH shall comply with the applicable Federal Acid Rain Program provisions.
16.	Env-A 1211.12 NO _x RACT for Auxiliary Boilers	NTAB1, NTAB2	<p>A) Each auxiliary boiler shall be limited to a NO_x RACT emission limit of 0.20 lb/MMBtu based on a 24-hour calendar day average, regardless of the type of fuel burned.</p> <p>B) The emissions from all auxiliary boilers shall be included in the calculation of both the actual and theoretical potential emissions from the stationary source.</p>
17.	State Permits to Operate Nos. PO-B-1031, PO-B-1032 Maximum Fuel Consumption	NTAB1, NTAB2	<p>A) Maximum fuel consumption rate of No. 2 fuel oil for each device shall not exceed 3.57 million gallons during any consecutive 12-month period.¹¹</p> <p>B) This fuel consumption limitation is to limit the NO_x emissions to less than 50 tons during any consecutive 12-month period.</p>
18.	Env-A 2002.06 (c)(2) Particulate Emission Standards	NTAB1, NTAB2	<p>PSNH shall not cause or allow emissions of particulate matter in excess of the following equation at each of the auxiliary boilers:</p> $E = 0.880 * I^{-0.166}$ <p>Where: E=maximum allowable particulate matter emission rate in lb/MMBtu I=maximum gross heat input rate in MMBtu/hr = 99.4 MMBtu/hr</p>
19.	Env-A 1211.01(j)(1) & 40 CFR 60.4211(e)	NTEG1	<p><u>Emergency Generators</u></p> <p>The emergency generator shall be limited to the following in any consecutive 12-month period:</p> <p>a. 100 hours for readiness testing and maintenance checks; and</p>

¹¹ The heating value of No. 2 fuel oil is assumed to be 140,000 BTU/gallon. The fuel consumption limits may vary based on the actual heat content of the fuel burned.

Table 6 – Federally Enforceable Operational and Emission Limitations

Item No.	Regulatory Cite	Applicable Emission Unit	Applicable Requirement
			b. 500 hours of emergency operation.
20.	Env-A 2002.02 and 2002.04(c) Visible Emission Standard for Fuel Burning Devices	NTEG1	The average opacity shall not exceed 20 percent for any continuous 6-minute period. The average opacity may exceed 20 percent for one period of 6 continuous minutes in any 60 minute period during startup, shutdown and malfunction.
21.	Env-A 2002.08 Particulate Emission Rate	NTEG1	The particulate matter emissions from fuel burning devices installed on or after January 1, 1985 shall not exceed 0.3 lb/MMBtu. ¹²
22.	Env-A 1002 Fugitive Dust	Facility wide	The Permittee shall take precautions, such as wetting, covering, shielding or vacuuming, to prevent, abate, and control fugitive dust emissions during any activity, which might create fugitive dust. Such activities include bulk hauling activities, including the transportation and transfer of mineral material over public roads and maintenance activities, including sweeping, vacuuming, or other activity involved with the upkeep of roads or parking lots.
23.	40 CFR 68 and 1990 CAA Section 112(r)(1) Accidental Release Program Requirements	Facility wide	The Permittee maintains no quantities of regulated substances above the threshold quantities established by the EPA under 40 CFR 68.130. Administrative controls will be established by the Permittee in order to ensure that inventories of regulated substances are maintained below the specified threshold quantities. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities: (A) Identify potential hazards that may result from such releases using appropriate hazard assessment techniques; (B) Design and maintain a safe facility; (C) Take steps necessary to prevent releases; and (D) Minimize the consequences of accidental releases that do occur. If, in the future, the Permittee wishes to store quantities of regulated substances above the threshold levels, a risk management plan shall be submitted to the Part 68 implementing agency prior to exceeding threshold quantity levels in a timely manner.
24.	40 CFR 61 Subpart M, Env-A 504.01(e) and Env-A 1800 Asbestos Management and Control	Facility wide	PSNH shall comply with the asbestos requirements of Env-A 1800 and 40 CFR 61.145 during demolition and/or renovation.
25.	40 CFR 60.4207 (NSPS Subpart III)	NTEG1	<u>Maximum Sulfur Content Allowable in Liquid Fuels</u> a. The sulfur content of diesel fuel burned in the emergency generator shall not exceed 500 ppm (0.05 percent sulfur by weight); and b. After October 1, 2010, the sulfur content of diesel fuel burned in the emergency generator shall not exceed 15 ppm (0.0015 percent sulfur by weight).

¹² PSNH shall demonstrate compliance with this requirement by using an EPA-approved emission factor and EPA/DES approved heat input content (Btu/gallon). This calculation shall be maintained on file at the facility.

Table 6 – Federally Enforceable Operational and Emission Limitations			
Item No.	Regulatory Cite	Applicable Emission Unit	Applicable Requirement
26.	Env-A 1211.02(o)	NTEG1	<p><u>Emergency Generator</u></p> <p>The emergency generator shall only operate:</p> <ul style="list-style-type: none"> a. As a mechanical or electrical power source when the primary power source for the Facility has been lost during an emergency such as a power outage; or b. During normal maintenance and testing as recommended by the manufacturer.

C. Annual SO₂ Allowance Programs (40 CFR 72, 40 CFR 73, Env-A 611.07, and Env-A 2900)

1. SO₂ Allowance Allocation

- a) In accordance with 40 CFR Part 73, SO₂ allowances pursuant to the Federal Acid Rain Program for this facility are allocated as indicated in the following table:

Table 7 – SO ₂ Allowance Allocation (tons)								
	2003	2004	2005	2006	2007	2008	2009	2010
NT1	11,660	11,660	11,660	11,660	11,660	11,660	11,660	10,613

- b) Pursuant to Env-A 2906.02 [State enforceable only], *Allocation of SO₂ Allowances*, for 2007 and subsequent years, PSNH's Schiller, Merrimack and Newington (NT1) Stations shall transfer the SO₂ Allowances allocated pursuant to the Federal Acid Rain Program to DES, and DES shall transfer SO₂ allowances (7,289 tons) calculated pursuant to Env-A 2900 plus any potential bonus allowances calculated pursuant to Env-A 2906.07, Bonus Allocation of SO₂ Allowances back to PSNH's Schiller, Merrimack, and Newington stations. The amount of SO₂ Allowances allocated to PSNH Newington shall be determined according the methodology in Env-A 2906.05, *Allowance Allocation Methodology*.

2. Compliance

- a) Pursuant to 40 CFR 73.35, the Permittee shall comply with the SO₂ emission limitation requirements.
- b) At the end of each calendar year, the Permittee shall hold sufficient SO₂ allowances equivalent to the SO₂ emissions during that calendar year.

3. General Provisions

Pursuant to Env-A 611.07 and Env-A 2900, SO₂ allowances lawfully held or acquired by the Permittee shall be governed by the following:

- a) Emissions from the affected units shall not exceed any SO₂ allowances held by the affected unit;
- b) The number of SO₂ allowances held by the Permittee shall not be limited;
- c) The Permittee shall not use SO₂ allowances to avoid compliance with any other applicable requirement of either state or federal rules or of the provisions of the Clean Air Act; and
- d) Any SO₂ allowances held by the Permittee shall be accounted for according to the procedures established in the applicable provisions of 40 CFR 72, 40 CFR 73, and 40 CFR 76.

4. Excess Emissions

Pursuant to 40 CFR 72.9(e), if the Permittee has excess emissions, the Permittee shall submit a proposed offset plan as required under 40 CFR 77 and pay the penalty and any interest without demand pursuant to 40 CFR 77. Additional penalties may apply pursuant to Env-A 2900. See Condition VIII. F.8.

5. Allowance Transfer

The Permittee shall transfer allowances according to the procedures in 40 CFR 73.50.

D. Ozone Season NO_x Budget Trading Program (Env-A 3200)

1. NO_x Allowance Allocation

- a) Pursuant to Env-A 3207.03, *Allocation of Allowances*, the amount of NO_x allowances allocated to PSNH shall be as set forth in the Table 8 below for the 2003, 2004, and 2005 control periods (ozone seasons of May 1 through September 30):

Table 8 – NOx Allowance Allocation for the Ozone Season (tons)			
Emission Unit	2003	2004	2005
NT1	579	507	434

2. The NOx allowances shall be allocated to PSNH for the 2006 control period (ozone season) and subsequent control periods according to the methodology in Env-A 3207.04, *Future Allowance Allocation Methodology*.
3. Ozone Season NOx Emissions Cap
 - a) Pursuant to Env-A 3200, PSNH shall not emit NOx emissions during any control period in excess of the amount of NOx allowances held in PSNH's NATS compliance account for that control period as of the allowance transfer deadline of November 30.
 - b) Pursuant to Env-A 3200, PSNH may obtain additional NOx allowances to comply with the NOx Budget Program.
4. Allowance Transfer and Use
 - a) Pursuant to Env-A 3209.01, *Marketable Emissions Authorization*, an allowance shall be a marketable emissions authorization that may be bought, sold, or traded at any time during any year, not just the current year.
 - b) Pursuant to Env-A 3209.02, *Limited Authorization*, an allowance shall only be used for compliance with the NOx Budget Program in a designated compliance year by being in a compliance account as of the allowance transfer deadline of November 30, or by being transferred into the compliance account by an allowance transfer submitted by the allowance transfer deadline.
 - c) PSNH shall comply with the NOx allowance transfer and use provisions pursuant to Env-A 3209, *Allowance Transfer and Use*.
 - d) Pursuant to Env-A 3209.09, *Price Disclosure*, subject to a claim of confidentiality in accordance with Env-A 103, PSNH shall make available to any person, all information regarding transaction cost and allowance price.
5. Allowance Banking
 - a) Pursuant to Env-A 3210.01, *Retention of Unused Allowances*, the banking of allowances shall be permitted to allow the retention of unused allowances from one year to a future year in either a compliance account, an overdraft account, or a general account.
 - b) Pursuant to Env-A 3210.02, *Account Designation*, unless otherwise permitted pursuant to Env-A 3210.04, *Early Reduction Allowances*, unused allowances as of the end of the allowance transfer deadline shall be retained in the compliance, overdraft, or general account and designated as banked allowances after the NATS administrator has made all

deductions for a given control period from the compliance account or overdraft account pursuant to Env-A 3215, *End-of-Season Reconciliation*.

- c) PSNH shall comply with the NO_x allowance banking provisions pursuant to Env-A 3210, *Allowance Banking*.

6. End-of-Season Reconciliation

- a) Pursuant to Env-A 3206.01, *Limited Authorization*, PSNH shall, no later than November 30 of each calendar year, hold respective a quantity of NO_x allowances in PSNH Newington's current year NATS account that is equal to or greater than the total NO_x emitted from PSNH Newington during the period May 1 through September 30 of the subject year.
- b) PSNH shall determine compliance and reconcile allowances by November 30 of each year for the control period of that year pursuant to Env-A 3215.

7. Authorized Account Representative (Env-A 3211.04)

- a) Only the AAR or alternate AAR shall request transfers of allowances in a NATS account.
- b) The AAR or alternate AAR shall be responsible for all transactions and reports submitted to the NATS.
- c) The alternative AAR shall have the same authority as the primary representative, however, all correspondence from the NATS administrator shall be directed to the primary AAR.
- d) Pursuant to Env-A 3211.05 (f), PSNH shall replace an AAR by submitting a revised Account Certificate of Representation to the NATS administrator along with the information contained in Env-A 3211.05(b) and (c) and the name of the AAR who is being replaced.

8. Conversion of Allowances to DERs

Pursuant to Env-A 3207.05, PSNH Newington may convert unused allowances to DERs in accordance with Env-A 3206.02(e) for use as NSR offsets during the ozone season and the procedures for DER generation pursuant to Env-A 3103. Upon conversion, PSNH Newington shall surrender those converted allowances as if they had been used for actual emissions. Under no other circumstances shall unused allowances be converted to, or used as, DERs or ERCs.

9. Prohibition on Property Rights (Env-A 3207.07)

- a) Neither an allowance nor any future allocations, which are subject to modification by DES, shall constitute a security or other form of property.
- b) An allowance shall not be used prior to the control period for which the allowance is allocated.

10. Excess Emissions and Enforcement Provisions (Env-A 3217)

- a) If emissions exceed the allowances held by PSNH Newington by the allowance transfer deadline (November 30), the NATS administrator shall automatically deduct three tons of allowances from the next control period for every ton of excess emissions from PSNH Newington compliance account or overdraft account.
- b) In accordance with RSA 125-J:4-a, for purposes of enforcement of the NO_x Budget Program, in determining the number of days of violation, any excess emissions for the control period shall presume that each day in the control period of 153 days, constitutes a day in violation unless PSNH Newington can demonstrate, through use of verifiable emissions data that a lesser number of days should be considered. In addition, each ton of excess emissions shall constitute a separate violation.

E. Non-Ozone Season NO_x Allowance Program (NO_x RACT Order No. ARD-98-001)

Pursuant to NO_x RACT Order No. ARD-98-001, PSNH's Schiller, Merrimack, and Newington stations shall comply with a NO_x emissions cap of 8208 tons for the non-ozone season beginning on October 1 and ending on April 30. Ozone season DERs and non-ozone season DERs may be used to comply with this non-ozone season limit. Previously generated (1995 through 1998) DERs may be used to comply with this emissions cap. DERs may be generated from PSNH's Newington and Schiller Stations, in accordance with the protocols submitted by PSNH to comply with this emissions cap.

F. Multiple Pollutant Annual Budget Trading and Banking Program (Env-A 2900) [State Enforceable Only]

1. SO₂ Allowance Allocation

Pursuant to Env-A 2900, *Multiple Pollutant Annual Budget Trading and Banking Program*, and subsequent revisions, DES shall allocate SO₂ Allowances to PSNH Newington according to the methodology in Env-A 2906.05, *Allowance Allocation Methodology* for 2007 and subsequent years.

2. NO_x Allowance Allocation

- a) Pursuant to Env-A 2900, *Multiple Pollutant Annual Budget Trading and Banking Program*, and subsequent revisions, DES shall allocate NO_x Allowances to PSNH Newington according to the methodology in Env-A 2906.05, *Allowance Allocation Methodology* for 2007 and subsequent years.
- b) Pursuant to Env-A 2900, *Multiple Pollutant Annual Budget Trading and Banking Program*, and subsequent revisions, for 2007 and subsequent years, DES shall calculate the difference between the annual NO_x budget (no more than 3,644 tons) and the ozone season NO_x allowances allocated pursuant to Env-A 3200.

- c) Pursuant to Env-A 2900, *Multiple Pollutant Annual Budget Trading and Banking Program*, and subsequent revisions, for 2007 and subsequent years, DES shall allocate annual NO_x allowances equivalent to the difference between the annual NO_x budget and the ozone season NO_x allowances to PSNH's Schiller, Merrimack, and Newington stations.

3. CO₂ Allowance Allocation

Pursuant to Env-A 2900, *Multiple Pollutant Annual Budget Trading and Banking Program*, and subsequent revisions, DES shall allocate CO₂ Allowances to PSNH Newington according to the methodology in Env-A 2906.05, *Allowance Allocation Methodology* for 2007 and subsequent years.

4. Allowance Transfer and Use

- a) Pursuant to Env-A 2907.01, *Marketable Emissions Authorization*, an allowance shall be a marketable emissions authorization that may be bought, sold, or traded at any time during any year, not just the current year.
- b) Pursuant to Env-A 2907.02, *Limited Authorization*, an allowance shall only be used for compliance with the Multiple Pollutant Annual Budget Trading and Banking Program in a designated compliance year by being in a compliance or overdraft account as of the allowance transfer deadline, or by being transferred into the compliance account by an allowance transfer submitted by the allowance transfer deadline.
- c) PSNH shall comply with the allowance transfer and use provisions pursuant to Env-A 2907, *Allowance Transfer and Use*, and Env-A 2909, *Allowance Tracking System*.
- d) Pursuant to Env-A 2907.08, *Price Disclosure*, subject to a claim of confidentiality in accordance with Env-A 103, PSNH shall make available to any person, all information regarding transaction cost and allowance price.
- e) Pursuant to Env-A 2907.09, *Use of Allowances by Utilities*, and RSA 125-J:5, X, the use of allowances by a utility as defined in RSA 362:2, shall be subject to such additional conditions as ordered pursuant to applicable law by the PUC.

5. Allowance Banking

- a) Pursuant to Env-A 2908.01, *Retention of Unused Allowances*, the banking of allowances shall be permitted to allow the retention of unused allowances from one year to a future year in either a compliance account, an overdraft account, or a general account.
- b) Pursuant to Env-A 2908.02, *Account Designation*, unless otherwise permitted pursuant to Env-A 2909.03, *General Accounts*, unused allowances as of the end of the allowance transfer deadline shall be retained in the compliance, overdraft, or general account and designated as banked allowances after the ATS administrator has made all deductions for a given year from the compliance account or overdraft account pursuant to Env-A 2913, *Compliance Certification*.

- c) Pursuant to Env-A 2908.03, *Bonus Early Allowances*, bonus early allowances shall be eligible for a one-time conversion to allowances in 2007. Bonus early allowances that are converted to allowances shall not be used as VERs, ERCs, or DERs.
6. Authorized Account Representative (Env-A 2909.04)
- a) Only the AAR or alternate AAR shall request transfers of allowances in an ATS account.
 - b) The AAR or alternate AAR shall be responsible for all transactions and reports submitted to the ATS.
 - c) The alternative AAR shall have the same authority as the primary representative, however, all correspondence from the ATS administrator shall be directed to the primary AAR.
 - d) Pursuant to Env-A 2909.05 (f), PSNH shall replace an AAR by submitting a revised Account Certificate of Representation to the ATS administrator along with the information contained in Env-A 2909.05(b) and (c) and the name of the AAR who is being replaced.
7. End-of-Season Reconciliation
- a) Pursuant to Env-A 2904.01, *Limited Authorization*, PSNH shall, no later than January 30 of each calendar year, hold respective quantities of SO₂, NO_x, and CO₂ in the PSNH Newington's respective ATS accounts equal to or greater than the respective total SO₂, NO_x, and CO₂ emitted from PSNH Newington during the previous year.
 - b) Pursuant to Env-A 2912.01, *Determination of Compliance*, monitored emissions data as reported by PSNH to the ETS administrator, and as adjusted by the administrator to be in accordance with Env-A 2910, *Emissions Monitoring*, combined with allowance allocations and transfers recorded in the ATS, shall provide the basis for a determination of compliance.
 - c) PSNH shall determine compliance and reconcile allowances by January 30 of each year beginning in 2008 pursuant to Env-A 2913.
 - d) Pursuant to Env-A 2912.02, *Request for Deduction of Allowances*, no later than January 30, the AAR shall request the ATS administrator to deduct previous year allowances from the compliance account or overdraft account equivalent to the number of available allowances to cover the emissions during the previous year. The AAR shall identify the compliance account or overdraft account from which the deductions shall be made and shall identify the serial number of the allowances to be deducted. If the AAR does not specify a serial number, allowances useable for that compliance year shall be deducted in the order of their arrival into PSNH Newington's account, with allocated allowances being deducted first, followed by the deduction of transferred allowances.
 - e) Pursuant to Env-A 2912.04, *Procurement of Additional Allowances*, if the emissions of PSNH Newington in the previous year exceed the allowances in PSNH Newington's compliance account and overdraft account, PSNH Newington shall obtain additional

allowances by January 30 so that the total number of allowances in PSNH Newington's compliance account and overdraft account, including allowance transfers properly submitted to the ATS administrator by January 30, equals or exceeds the previous year annual emissions rounded to the nearest whole ton.

8. Excess Emissions and Enforcement Provisions (Env-A 2914)

- a) If emissions exceed the allowances held by PSNH Newington by the allowance transfer deadline (January 30), the Allowance Tracking System administrator shall automatically deduct three tons of allowances for every ton of excess emissions.
- b) In accordance with RSA 125-O:7, for purposes of enforcement of the Multiple Pollutant Annual Budget Trading and Banking Program, in determining the number of days of violation, any excess emissions for the year shall create a presumption that each day in the year of 365 days, constitutes a day in violation unless PSNH Newington can demonstrate, through use of verifiable emissions data that a lesser number of days should be considered. In addition, each ton of excess emissions shall constitute a separate violation.

9. Conversion of Allowances to DERs or VERs

- a) Pursuant to Env-A 2904.01 (d), allowances shall not be considered offsets, although NO_x allowances which are not used to satisfy the requirements of Env-A 2900, and which are not banked, may be converted to non-ozone season NO_x DERs in accordance with Env-A 3100.
- b) Pursuant to Env-A 2904.02, *Conversion of Allowances to DERs or VERs*, if PSNH converts unused NO_x allowances to NO_x DERs in accordance with Env-A 2904.01(d) and the procedures for DER generation pursuant to Env-A 3103, or converts unused CO₂ allowances to VERs in accordance with Env-A 3800, PSNH shall surrender those converted allowances as if they had been used for actual emissions.

10. Prohibition on Property Rights (Env-A 2904.04)

- a) Neither an allowance nor any future allocations, which are subject to modification by DES, shall constitute a security or other form of property.
- b) An allowance shall not be used prior to the year for which the allowance is allocated.

G. Discrete Emission Reduction Trading Program (Env-A 3100)

In accordance with Env-A 3100, NO_x RACT Orders Nos. ARD-97-001 and ARD-98-001, and the Notices of Simultaneous Generation and Use of DERs originally submitted on April 10, 1998, and annually thereafter upon entry of the DERs into the registry by DES, PSNH Newington shall be allowed to bank DERs for PSNH Newington's own future use.

H. Monitoring/Testing Requirements

The Permittee is subject to the monitoring/testing requirements as contained in Table 9 below:

Table 9 – Monitoring/Testing Requirements					
Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
1.	NT1	NOx Emissions	For NT1, PSNH shall install, certify, operate and maintain, a NOx-diluent continuous emission monitoring system (consisting of a NOx pollutant concentration monitor and an O ₂ or CO ₂ diluent gas monitor) with an automated data acquisition and handling system for measuring and recording NOx concentration (in ppm) averaged on an hourly and 24-hour calendar day basis, O ₂ or CO ₂ concentration (in percent O ₂ or CO ₂) and NOx mass emission rate (in lb/MMBtu) averaged on an hourly, 24-hour calendar day, and annual basis for each unit. PSNH shall account for total NOx emissions, both NO and NO ₂ , either by monitoring for both NO and NO ₂ or by monitoring for NO only and adjusting the emissions data to account for NO ₂ . PSNH shall measure and record NOx emissions in lb/hr averaged for one-hour and a 24-hour calendar day, and tons/consecutive 12-month period. PSNH shall calculate hourly, quarterly, and annual NOx emission rates (in lb/mmBtu) by combining the NOx concentration (in ppm), diluent concentration (in percent CO ₂), and percent moisture according to the procedures in 40 CFR 75 Appendix F.	Continuously	Env-A 808.02 (a) (new) and 40 CFR 75.10(a)(2), 75.12, and Env-A 1211.03 (f)
2.	NT1	NOx Mass Emissions	For NT1, PSNH shall calculate hourly NOx mass emissions (in lbs) by multiplying the hourly NOx emission rate (in lbs/mmBtu) by the hourly heat input rate (in mmBtu/hr) and the unit or stack operating time. PSNH shall also calculate quarterly and cumulative year-to-date NOx mass emissions and (in tons) by summing the hourly NOx mass emissions according to the procedures in 40 CFR 75 Appendix F Section 8.	Hourly, quarterly, and cumulative year-to-date	40 CFR 75.71, and 75.72 and Env-A 3212 and Env-A 2910
3.	NT1	Ozone Season NOx Emission Rate and NOx Mass Emissions	PSNH, when required, shall determine the ozone season NOx emission rate (in lb/MMBtu) by dividing ozone season NOx mass emissions (in lbs) by heat input. PSNH shall also calculate cumulative NOx mass emissions for the ozone season (in tons) by	During the ozone season	Env-A 3212.01 and 40 CFR 75.75(b) and 75.72

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			summing the hourly NOx mass emissions according to the procedures in 40 CFR 75 Appendix F Section 8.		
4.	NT1, NTAB1, NTAB2	Sulfur Content of No. 2 Fuel Oil, No. 6 Fuel Oil, and Crude Oil	Fuel delivery tickets, other documentation from the fuel supplier or testing in accordance with appropriate ASTM test methods that certify the weight-percent of sulfur for each delivery of the No. 2 fuel oil, No. 6 fuel oil, and crude oil.	Each delivery of fuel	Env-A 806.02
5.	NT1	Sulfur Content of Natural Gas	Documentation from fuel supplier or conduct testing to determine the sulfur content of natural gas.	Upon request by DES and/or EPA	Env-A 809.02 (old) and Env-A 806.03 (new)
6.	NT1	SO ₂ Emissions	PSNH shall install, certify, operate and maintain, an SO ₂ CEMS automated data acquisition and handling system for measuring and recording SO ₂ concentration (in ppm) averaged on an hourly and 24-hour calendar day basis, volumetric gas flow (in scfh), and SO ₂ mass emissions (in lb/hr averaged over one hour and each 24-hour calendar day, and tons/consecutive 12-month period and tons/calendar year) for each unit. PSNH shall demonstrate compliance with the State Acid Rain Program emission caps by using the CEMS data.	Continuously	Env-A 808.02 (a)(1) (new) and 40 CFR 75.10 (a)(1)
7.	NT1	CO ₂ Emissions	PSNH shall install, certify, operate and maintain, a CO ₂ CEMS automated data acquisition and handling system. PSNH shall measure and record CO ₂ emissions in lb/hr averaged over each 24-hour calendar day and CO ₂ concentration in percent averaged over each hour and over each 24-hour calendar day.	Continuously	40 CFR 75.10(a)(3), and State Permit to Operate No. PO-B-1030
8.	NT1	Stack volumetric flow rate	PSNH shall install, certify, operate and maintain, a CEMS automated data acquisition and handling system to measure and record stack volumetric flow rate (in kscfm) averaged over each hour and over each 24-hour calendar day.	Continuously	40 CFR 75, Env-A 2910.02
9.	NT1	Heat Input Rate	PSNH shall determine the heat input rate (in MMBtu/hr) to each unit for every hour or part of an hour any fuel is combusted following the procedures in 40 CFR 75 Appendix F.	Hourly	40 CFR 75.10(c) and Env-A 2910.02
10.	NT1	Net Electrical Output	PSNH shall monitor and/or calculate net electrical output.	Annually	Env-A 2910.02 and 40 CFR 75
11.	NT1	Ozone Season Heat Input	To determine the number of NOx allowances allocated, PSNH shall calculate ozone season	Hourly during ozone season	Env-A 3212.01 and

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			heat input by summing each unit's hourly heat input determined according to the procedures in 40 CFR 75 for all hours in which the unit operated during the ozone season		40 CFR 75.75(a)
12.	NT1	Operating Hours	PSNH shall maintain a log of the operating hours of the boiler.	Continuously	State Permit to Operate No. PO-B-1030
13.	NT1	Opacity	PSNH shall install, certify, operate and maintain, a continuous opacity monitoring system with the automated data acquisition and handling system for measuring and recording the opacity of emissions (in percent opacity) for each 6-minute period for each unit. As necessary, PSNH shall also use US EPA Method 9 to estimate opacity.	Continuously	40 CFR 75.10(a)(4) and Env-A 805.02 (old) and Env-A 808.02 (a) (new) and 807.02 (new)
14.	NT1	PM	PSNH shall conduct stack testing using US EPA Method 1-5 or 1-4 and 17 or other method approved by DES to determine the PM emissions. PSNH shall calculate and record the PM emission rate in lb/MMBtu on a 24-hour calendar day average and tons/consecutive 12-month period using stack test results and operating hours. PSNH may use other EPA-approved emission calculating methods to calculate PM emissions.	Testing at least every 5 years and/or upon request by DES and/or EPA	40 CFR 70.6 (a)(3)(i)(B)
15.	NT1	CO	PSNH shall install, certify, operate and maintain a CO CEMS automated data acquisition and handling system for measuring and recording CO concentration (in ppm) averaged on an hourly and 24-hour calendar day basis, volumetric gas flow (in scfh), and CO mass emissions (in lb/hr averaged over one hour and each 24-hour calendar day, and tons/consecutive 12-month period and tons/calendar year) for each unit. PSNH shall conduct RATA testing for CO annually to verify the data.	Continuously	40 CFR 70.6 (a)(3)(i)(B)
16.	NT1	Temperature of the flue gas at the outlet of the boiler	PSNH shall measure and record the temperature at the outlet of the boiler to determine the inlet temperature of the ESP using a thermocouple or other temperature-monitoring device.	Daily	40 CFR 70.6 (a)(3)(i)(B)
17.	NT1	Voltage of the TR Sets	PSNH shall measure and record the secondary voltage of the TR Sets using a voltage meter or equivalent monitoring device.	Daily	40 CFR 70.6 (a)(3)(i)(B)
18.	NT1	Current (in mAmps and KW)	PSNH shall measure and record the current (in mAmps and KW) using a current meter or equivalent monitoring device.	Daily	40 CFR 70.6 (a)(3)(i)(B)
19.	NT1	Spark rate per	PSNH shall measure and record the spark rate	Daily	40 CFR 70.6

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
		minute	per minute.		(a)(3)(i)(B)
20.	NTI	ESP fields out of service	PSNH shall monitor and record the ESP fields out of service.	Daily	40 CFR 70.6 (a)(3)(i)(B)
21.	NT1	Hours that Fly Ash Reinjection System Blowers is in Operation	PSNH shall maintain a log of the hours that the flyash reinjection system is operated.	Daily when flyash reinjection is in operation	40 CFR 70.6 (a)(3)(i)(B)
22.	NT1	Toner Usage	PSNH shall maintain records of the amount of toner combusted in the boiler in tons/day in order to demonstrate compliance with RSA 125-I and Env-A 1400.	Daily when combusting toner	40 CFR 70.6 (a)(3)(i)(B)
23.	NT1	SO ₂ , NO _x , CO, PM, VOCs Emissions (tons/month and tons/consecutive 12-month period)	Pursuant to the 40 CFR 52.21 (b)(21)(v) (dated July 1, 2002) ¹³ , for an electric utility steam generating unit (other than a new unit or the replacement of an existing unit), actual SO ₂ , NO _x , CO, PM, VOC emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, provided PSNH maintains and submits to DES on an annual basis for a period of 5 years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed 10 years, may be required by DES, if it determines such a period to be more representative of normal source post-change operations. Pursuant to 40 CFR 52.21(b)(33) (dated July 1, 2002), representative actual annual emission means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after the physical change or change in the method of operation of a unit (or a different consecutive two-year period within 10 years after that change, where DES determines that such period is more representative of normal source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions,	Monthly	40 CFR 70.6 (a)(3)(i)(B) and 40 CFR 52.21 (b)(21) and (33), dated July 1, 2002

¹³ See the letter dated March 13, 2002 from Kenneth A. Colburn, Director, Air Resources Division, DES to John M. McDonald, Vice President-Operations, PSNH concerning conditional new source review applicability determination concerning modifications at Newington Station.

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			DES shall consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under Title IV of the CAA; and exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole. In order to calculate annual emissions as required pursuant to 40 CFR 52.21 (dated July 1, 2002), PSNH shall monitor emissions of SO ₂ , NO _x , CO, PM, and VOCs for a period of 5 years or more beginning in 2002.		
24.	NT1	Fuel Flow Meters-Periodic Monitoring	PSNH shall inspect, when NT1 is in operation, maintain and/or repair the fuel oil flow meters as necessary to ascertain accurate operation in accordance with manufacturer's specifications. PSNH and/or the manufacturer shall calibrate or validate accurate operation of the fuel oil flow meters during planned major turbine-generator outages.	During planned major turbine-generator outages	40 CFR 70.6 (a)(3)(i)(B)
25.	NTAB1, NTAB2	NO _x Emissions (for NO _x RACT)	PSNH shall conduct stack testing using US EPA Method 7E to determine the NO _x emissions. PSNH shall calculate and record the NO _x emission rate in lb/MMBtu on a 24-hour calendar average, lb/hr on a 24-hour calendar average, and tons/consecutive 12-month period using fuel consumption measured with fuel meters and the stack test results and operating hours or other EPA-approved methods.	Every 3 years and upon written request by DES and/or EPA	Env-A 1211.12 (e) and 1211.20 and Env-A 803.02 and 40 CFR 70.6 (a)(3)(i)(B)
26.	NTAB1, NTAB2, NTEG1	Opacity	US EPA Method 9	As necessary as determined by PSNH, DES, and/or EPA	40 CFR 70.6 (a)(3)(i)(B)
27.	NTAB1, NTAB2	Sulfur Content of Propane	Fuel delivery tickets, other documentation from the fuel supplier or testing in accordance with appropriate ASTM test methods that certify the weight-percent of sulfur for each delivery of the propane.	Upon request by DES and/or EPA	Env-A 809.02 (old) and Env-A 806.03 (new)

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
28.	NTAB1, NTAB2	Operating hours	PSNH shall maintain a log of the operating hours of each device.	Monthly	State Permits to Operate Nos. PO-B-1031 and PO-B-1032 and 40 CFR 70.6 (a)(3)(i)(B)
29.	NTAB1, NTAB2	TSP	PSNH shall conduct stack testing using US EPA Method 1-5 or 1-4 and 17 to determine the TSP emission rate in lb/MMBtu. PSNH shall calculate and record the TSP emission rate in lb/MMBtu averaged over 24-hour calendar day using fuel consumption data and EPA approved emission factors or stack test results.	Stack testing upon request by DES and/or EPA	40 CFR 70.6 (a)(3)(i)(B)
30.	NTAB1, NTAB2	Fuel Consumption	PSNH shall measure and record the amount of fuel consumed using fuel flow meters and/or inventory purchase records.	Monthly	40 CFR 70.6 (a)(3)(i)(B)
31.	NTEG1	Operating hours	The emergency generator shall be equipped with a non-resettable hour meter.	Continuous	40 CFR 60.4209(a)
32.	NTAB1, NTAB2	Fuel Flow Meters- Periodic Monitoring	PSNH shall ensure that the fuel flow metering devices are calibrated according to manufacturer specifications or in a manner approved by the Division and at frequency consistent with manufacturer recommendations, but at a minimum every five calendar years.	According to manufacturer recommendation, but at a minimum every five calendar years	40 CFR 70.6 (a)(3)(i)(B)
33.	NT1	CEM Hourly Operating Requirements & Valid Hour of CEM Data	Pursuant to Env-A 808.01 and 808.03 and 40 CFR 75.10(d), the Permittee shall ensure that the CEMS and components meet the following hourly operating requirements: A) The Permittee shall ensure that each CEM is capable of completing a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute interval pursuant to 40 CFR 75.10(d) and pursuant to Env-A 808.03(c)(2) for each successive 5-minute period for gaseous emissions, unless a longer time period is approved in accordance with Env-A 809	Hourly	40 CFR 75.10(d) and Env-A 808.01(i) and 808.03

¹⁴ The requirements of 40 CFR 75 are less stringent than Env-A 808. 40 CFR 75 requires hourly averages to be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. 40 CFR 75 allows an hourly average to be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) if data are unavailable as a result of the performance of calibration, quality assurance, or preventive maintenance activities pursuant to 40 CFR 75.21 and 40 CFR Appendix B or backups of data from the data acquisition and handling system, or recertification, pursuant to 40 CFR 75.20.

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>B) The Permittee shall reduce all SO₂ concentrations, volumetric flow, SO₂ mass emissions, CO₂ concentration, CO₂ mass emissions (if applicable), NO_x concentration, and NO_x emission rate data collected by the monitors to hourly averages.</p> <p>C) The Permittee shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour.</p> <p>D) Failure of an SO₂ or CO₂ pollutant concentration monitor, NO_x concentration monitor, flow monitor, or NO_x-diluent CEMS to acquire the minimum number of data points for calculation of an hourly average shall result in the failure to obtain a valid hour of data and the loss of such component data for the entire hour.</p> <p>E) For a NO_x-diluent monitoring system, an hourly average NO_x emission rate in lb/mmBtu is valid only if the minimum number of data points is acquired by both the NO_x pollutant concentration monitor and the diluent monitor (CO₂).</p> <p>F) If a valid hour of data is not obtained, the Permittee shall estimate and record emissions or flow data for the missing hour by means of the automated data acquisition and handling system, in accordance with the applicable procedure for missing data.</p> <p>G) Pursuant to Env-A 808.01(i), a valid hour of CEM emissions data means a minimum of 42 minutes of CEM readings taken in any calendar hour, during which the CEM is not in an out of control period and the facility is in operation.¹⁴</p> <p>H) Pursuant to Env-A 808.03(a), PSNH shall average and record the CEM data for gaseous emissions for each calendar hour.</p> <p>I) Pursuant to Env-A 808.03(c)(1), all CEM systems shall include a means to display instantaneous values of percent opacity and gaseous emission concentrations.</p>		
34.	NT1	Stack Volumetric	PSNH shall meet the following requirements for the stack volumetric flow measuring	Continuously	Env-A 808.03(d)

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
		Flow Measuring Device	device: A) All differential pressure flow monitors shall have an automatic blow-back purge system installed and in wet conditions, shall have the capability for drainage of the sensing lines; and B) The stack flow monitoring system shall have the capability for manual calibration of the transducer while the system is on-line and for a zero check.		
35.	NT1	Minimum Measurement Capability Requirements for CEMS	The Permittee shall ensure that each CEMS is capable of accurately measuring, recording, and reporting data, and shall not incur an exceedance of the full scale range, except as provided in 40 CFR 75 Appendix A Sections 2.1.1.5, 2.1.2.5, and 2.1.4.3.	As specified by regulation	40 CFR 75.10(f)
36.	NT1	COMS Hourly Operating Requirements	Pursuant to 40 CFR 75.10(d), the Permittee shall ensure that each COMS and components meet the following hourly operating requirements: A) The Permittee shall ensure that each continuous opacity monitoring system is capable of completing a minimum of one cycle of sampling and analyzing (and recording pursuant to Env-A 808.03(c)(2) unless a longer time period is approved in accordance with Env-A 809) for each successive 10-second period and one cycle of data recording for each successive 6-minute period. B) The Permittee shall reduce all opacity data to 6-minute averages calculated in accordance with the provisions of 40 CFR 51 Appendix M, except where the SIP or operating permit requires a different averaging period, in which case the State requirement shall satisfy this Acid Rain Program requirement as shown below. C) Pursuant to Env-A 808.03(b)(1), PSNH shall average the opacity data to result in consecutive, non-overlapping 6-minute averages; and D) Pursuant to Env-A 808.03(b)(2), for units subject to the Env-A 2002.04(b) exemption, the total number of minutes in any 8-hour period where the opacity, as averaged in non-overlapping 6-minute periods, exceeds the applicable opacity standard.	Sampling for successive 10-second period and recording for successive 6-minute period	40 CFR 75.10(d) and Env-A 808.03(b) and (c)

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			E) Pursuant to Env-A 808.03(c)(1), all CEM systems shall include a means to display instantaneous values of percent opacity and gaseous emission concentrations.		
37.	NT1	Specific Provisions for Monitoring SO ₂ Emissions (SO ₂ emissions and flow monitors)	<p>A) Pursuant to 40 CFR 75.11, the Permittee shall meet the specific provisions for SO₂ CEMS and flow monitoring systems: PSNH shall meet the general operating requirements in 40 CFR 75.10 for an SO₂ continuous emission monitoring system and a flow monitoring system.</p> <p>B) During hours when the unit combusts only gaseous fuel, PSNH shall determine SO₂ emissions in accordance with 40 CFR 75.11 (e)(1), (e)(2) or (e)(3).</p> <p>C) Pursuant to 40 CFR 75.11 (e)(3), PSNH may determine SO₂ mass emissions using a certified SO₂ continuous monitoring system, in conjunction with a certified flow rate monitor system. However, when the unit burns any gaseous fuel that is very low sulfur fuel, as defined by 40 CFR 72.2, the SO₂ monitoring system shall be subject to the quality assurance provisions of 40 CFR 75.11 (e)(3).</p>	As specified by regulations	40 CFR 75.11
38.	NT1	Specific Provisions for Monitoring NO _x Emissions	<p>A) Pursuant to 40 CFR 75.12, 75.71, and 75.72 and Env-A 3212, the Permittee shall meet the specific provisions for NO_x-diluent CEMS, including the following:</p> <ol style="list-style-type: none"> 1) Meet general operating requirements in 40 CFR 75.10 for a NO_x continuous emission monitoring system. The diluent gas monitor in the NO_x CEMS may measure either O₂ or CO₂ concentration in the flue gases. 2) Comply with NO_x emission rate procedures contained in 40 CFR 75.12(c). <p>B) The Permittee shall meet the annual and ozone season monitoring requirements according to 40 CFR 75.74, as applicable.</p>	Continuously	40 CFR 75.12, 75.71, and 75.72 and Env-A 3212
39.	NT1	Specific Provisions for Monitoring CO ₂	Pursuant to 40 CFR 75.13, the Permittee shall meet the specific provisions for CO ₂ CEMS and flow monitoring systems.	Continuously	40 CFR 75.13

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
		Emissions			
40.	NT1	Specific Provisions for Monitoring Opacity	Pursuant to 40 CFR 75.14, the continuous opacity monitoring and recording system shall meet all the design, installation, equipment, and performance specifications of 40 CFR 60, Appendix B, Performance Specification 1, and all the operational and quality assurance requirements of Env-A 808 (new).	Continuously	40 CFR 75.14 and Env-A 808 (new)
41.	NT1	CEMS and COMS and Alternative Monitoring Certification	Pursuant to 40 CFR 75.20 and 40 CFR 75.70(d) and Env-A 3212.07 and Env-A 3212.10, the Permittee shall recertify the CEMS and COMS and alternative monitoring system whenever the Permittee makes a replacement, modification, or change to the systems or to the facility that could significantly affect the ability of the systems to accurately measure and record the requisite data. The Permittee must submit an application for recertification of the monitoring system to EPA and DES.	Whenever the Permittee makes a replacement, modification, or change to the systems or to the facility that could significantly affect the ability of the systems to accurately measure and record the requisite data	40 CFR 75.20, 40 CFR 75.70(d), and 40 CFR 75 Appendix E Section 1.2 and Env-A 3212.02, 3212.06, 3212.07, 3212.09, 3212.10 and 2910.04
42.	NT1	QA/QC Requirements	<p>A) Pursuant to 40 CFR 75.21 (a)(1) and 40 CFR 75.70, the Permittee shall operate, maintain, and calibrate each CEMS according to the quality assurance and quality control procedures in 40 CFR 75 Appendix B.</p> <p>B) Pursuant to 40 CFR 75.21 (a)(4), PSNH is not required to perform the daily and quarterly assessments of the SO₂ monitoring system on any day or any quarter when only gaseous fuel is combusted, if the SO₂ emissions are determined in accordance with 40 CFR 75.11 (e)(1) or (e)(2). However, if any daily calibration test or linearity test is failed when the unit is combusting gaseous fuel only, the SO₂ monitoring system is out-of-control. The length of the out-of-control period shall be determined according to 40 CFR 75 Appendix B Section 2.1.4 or 2.2.3.</p> <p>C) Pursuant to 40 CFR 75.21 (a)(5), PSNH shall perform the relative accuracy test audits of the SO₂ monitoring system only when the higher-sulfur fuel is combusted.</p> <p>D) Pursuant to 40 CFR 75.21(b), the Permittee shall operate, calibrate, and</p>	As specified by regulation	40 CFR 75.21 and 75.70 and 75.74

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>maintain each COMS according to the procedures specified in the SIP, pursuant to 40 CFR 51 Appendix M.</p> <p>E) Pursuant to 40 CFR 75.21(c), the Permittee shall ensure that all calibration gases used to quality assure the operation of the instrumentation shall meet the definition in 40 CFR 72.2.</p> <p>F) Pursuant to 40 CFR 75.21(d) and (e), the Permittee shall comply with the provisions concerning consequences of audits and audit decertification.</p> <p>G) Within and prior to the ozone season, the Permittee shall meet the quality assurance requirements contained in 40 CFR 75.74, as applicable.</p>		
43.	NT1	Reference Test Methods for Certification and Recertification of CEMS or COMS	The Permittee shall use the reference test methods listed in 40 CFR 75.22 and included in Appendix A to 40 CFR 60 to conduct monitoring system tests for certification or recertification of CEMS and excepted monitoring systems under 40 CFR 75 Appendix E and quality assurance and quality control procedures.	During certification or recertification tests	40 CFR 75.22
44.	NT1	Out-of-Control Periods	<p>A) Pursuant to 40 CFR 75.21(e)(2), whenever a CEMS or COMS fails a quality assurance audit or any other audit, the system is out-of-control, and the Permittee shall follow the procedures for out-of-control periods in 40 CFR 75.24.</p> <p>B) Pursuant to Env-A 3212.10 and 2910.06, whenever any monitoring system fails to meet the quality assurance requirements of 40 CFR 75 Appendix B, PSNH shall substitute the data using the applicable procedures in 40 CFR 75, Subpart D, Appendix D or E.</p> <p>C) Pursuant to 75.24, if an out-of-control period occurs to a monitor or CEMS, the owner or operator shall take corrective action and repeat the tests applicable to the out of control parameter as described in 40 CFR 75 Appendix B.</p> <p>1) For daily calibration error tests, an out of control period occurs when the calibration error of a pollutant concentration monitor exceeds 5.0% based upon the span value, the calibration error of a diluent gas</p>	As specified by regulation	40 CFR 75.21(e)(2) and 75.24 and Env-A 3212.10 and 2910.06 and 808.01(g)

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>monitor exceeds 1.0% O₂ or CO₂, or the calibration error of a flow monitor exceeds 6.0% based upon the span value, which is twice the applicable specification in 40 CFR 75 Appendix A.</p> <p>2) For quarterly linearity checks, an out of control period occurs when the error in linearity at any of the three gas concentrations (low, mid-range, and high) exceeds the applicable specification in 40 CFR 75 Appendix A.</p> <p>3) For relative accuracy test audits (RATAs), cylinder gas audit (CGAs), and relative accuracy audits (RAAs), an out of control period occurs when the sampling is completed and the CEMS fails the accuracy criteria until successful completion of the same audit after corrective action has occurred.</p> <p>D) Pursuant to Env-A 3212.10, whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement pursuant to Env-A 800 or the applicable provisions of 40 CFR Part 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the department shall issue a notice of disapproval of the certification status of such system or component.</p> <p>E) For the purposes of this section, an audit shall be either a field audit or an audit of any information submitted to the department or the administrator.</p> <p>F) The data measured and recorded by the system or component shall not be considered valid quality-assured data from the date of issuance of the notification of the disapproval of certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests</p>		

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			in accordance with Env-A 3212.07(t). G) The owner or operator shall follow the initial certification or recertification procedures for each disapproved system.		
45.	NT1	Out of Control Periods for Opacity	Out of control period for a CEMS measuring opacity is as follows: A) The time period beginning with the completion of the daily calibration drift check where the CD exceeds 2% opacity for 5 consecutive days, and ending with the CD check after corrective action has occurred that results in the performance specification drift limits being met; B) The time period beginning with the completion of a daily CD check preceding the daily CD check that results in the CD being greater than 5% opacity and ending with the CD check after corrective action has occurred that results in the performance specification drift limits being met; or C) The time period beginning with the completion of a quarterly opacity audit where the CEMS fails the calibration error test as specified in 40 CFR 60, Appendix B, Specification 1 and ending with successful completion of the same audit where the CEMS passes the calibration error test established after corrective action has occurred.	As specified by regulation	Env-A 808.01(g)(2)
46.	NT1	Data Availability and Missing Data Substitution Procedures	A) The Permittee shall follow the procedures in 40 CFR 75.30 through 75.37, 75.70(f), 75.74, and 40 CFR 75 Appendix E when a valid, quality-assured hour of data is not measured or recorded. B) Pursuant to Env-A 808.02(c)(2), PSNH shall comply with the minimum percentage data availability requirements pursuant to Env-A 808.10(a)-(d) to meet the requirements of Env-A 3200, <i>NO_x Budget Program</i> . C) Pursuant to Env-A 808.10, if PSNH cannot meet the percentage data availability requirements, PSNH shall also follow the provisions of Env-A 808.10(e) – (g). D) Pursuant to 40 CFR 75.24(e), if COMS is out of control, PSNH shall follow the data availability requirements of Env-A 808.10.	As specified by regulation	40 CFR 75.30 through 75.37 and 75.50(f) and 75.24(e) and 75.74 and 40 CFR 75 Appendix E Section 2.5 and Env-A 808.10 and 808.02(c)(2)

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
47.	NT1	General CEM Requirements	<p>A) Pursuant to 40 CFR 75.5 (b), the Permittee must operate NT1 in compliance with the requirements of 40 CFR 75.2 through 75.75 and 40 CFR 75 Appendices A through G.</p> <p>B) Pursuant to 40 CFR 75.5 (d), the Permittee shall account for all emissions of SO₂, NO_x, and CO₂ in accordance with 40 CFR 75.10 through 75.19.</p> <p>C) Pursuant to 40 CFR 75.5 (e), the Permittee shall not disrupt the continuous emission monitoring system or other approved emission monitoring method, and thereby not monitor or record SO₂, NO_x, and CO₂, except for periods of recertification, or periods when calibration, quality assurance, or maintenance is performed pursuant to 40 CFR 75.21 and 40 CFR 75 Appendix B.</p> <p>D) The CEMS shall meet the most stringent requirements of 40 CFR 75 and Env-A 808 (new).</p>	Continuously	40 CFR 75.5 and Env-A 808 (new)
48.	NT1	CEMS Performance and Audit Requirements	<p>The Permittee shall ensure that each CEMS meets the following requirements:</p> <p>A) Each CEMS meets equipment, installation, and performance specifications in 40 CFR 75 Appendix A;</p> <p>B) Each CEMS is maintained according to the quality assurance and quality control procedures in 40 CFR 75 Appendix B; and</p> <p>C) Each CEMS shall record SO₂ and NO_x emissions in the appropriate units of measurement.</p> <p>D) PSNH shall comply with the most stringent CEM audit requirements contained in 40 CFR 75 and Env-A 808.07, <i>General Audit Requirements</i>, Env-A 808.08, <i>Audit Requirements for Gaseous CEM Systems</i>, and Env-A 808.09, <i>Audit Requirements for Opacity CEM Systems</i>.</p>	As specified by regulation	40 CFR 75.10(b) and Env-A 808.07, 808.08, and 808.09 and 40 CFR 75 Appendices A and B
49.	NT1	NO _x Mass Emissions – General Provisions	Pursuant to Env-A 3200, <i>NO_x Budget Program</i> , PSNH shall comply with the provisions of 40 CFR 75 Subparts A, C, D, E, F, and G and Appendices A through G applicable to NO _x concentration, flow rate, NO _x emission rate and heat input, as set forth and referenced in Subpart H.	As specified by regulation	Env-3212.01 and 40 CFR 75.70(a)
50.	NT1	NO _x Mass	PSNH is prohibited from the following:	Continuously	40 CFR

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
		Emissions Provisions-Prohibitions	<p>A) Using alternative monitoring system, reference method, or any other alternative for the required CEMS without approval through petition process in 40 CFR 75.70(h).</p> <p>B) Discharging or allowing discharge of NO_x emissions without accounting for all emissions in accordance with the provisions of Subpart H, except as provided in 40 CFR 75.74.</p> <p>C) Disrupting the CEMS or any other approved emission monitoring method, and thereby avoid monitoring and recording NO_x mass emissions, except for periods of re-certification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the provisions of 40 CFR 75 Subpart H applicable to the monitoring systems under 40 CFR 75.71, except as provided in 40 CFR 75.74.</p> <p>D) Retiring or permanently discontinuing the use of the CEMS, or any other approved emission monitoring system except under one of the following circumstances:</p> <ol style="list-style-type: none"> 1) During a period that the unit is covered by a retired unit exemption that is in effect under the State or federal NO_x mass emission reduction program that adopts the requirements of Subpart H; 2) The owner or operator is monitoring NO_x emissions from the affected unit with another certified monitoring system approved, in accordance with the provisions of 40 CFR 75.70(d); or 3) The designated representative submits notification of the date of certification testing of a replacement monitoring system in accordance with 40 CFR 75.61. 		75.70(c)
51.	NT1	NO _x Mass Emissions – Petitions for Alternatives	PSNH may submit a petition to DES and EPA requesting an alternative to any requirement of 40 CFR 75 Subpart H. Such a petition shall meet the requirements of 40 CFR 75.66 and any additional requirements established by Env-A 3200 or other applicable state or Federal NO _x mass emission reduction programs that adopt the requirements of 40	Not applicable	40 CFR 75.70(h) and 40 CFR 75 Subpart E and 40 CFR 75 Appendix E and Env-A 3212.09

Table 9 – Monitoring/Testing Requirements

Item No.	Device	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			CFR 75 Subpart H.		
52.	NT1	NOx Mass Emissions – NOx Emission Rate and Heat Input –Oil/Gas Non-Peaking Units	For an affected unit that qualifies as a non-peaking gas-fired or non-peaking oil-fired unit, PSNH shall either: A) Meet the requirements of 40 CFR 75.71(a) and (b); or B) Meet the general operating requirements in 40 CFR 75.10 for NOx diluent continuous emission monitoring system, except as provided in accordance with 40 CFR 75 Subpart E, and use the procedures specified in 40 CFR 75 Appendix D for determining hourly heat input. The heat input apportionment provisions in Section 2.1.2 of 40 CFR 75 Appendix D shall not be used to meet the NOx mass reporting provisions of 40 CFR 75 Subpart H.	As specified by regulation	40 CFR 75.71(c)
53.	NT1	NOx Mass Emissions – Annual Monitoring	PSNH shall meet the requirements of 40 CFR 75 Subpart H during the entire calendar year.	During the calendar year	40 CFR 75.74(a) and (b)
54.	NT1	Valid Averaging Periods for Gaseous and Opacity CEMS	The number of hours of valid CEM and COM data required for determining a valid averaging period for the different emission standard periods shall be: A) For a 3-hour emission standard period, 2 hours of valid data; B) For a 4-hour emission standard period, 3 hours of valid data; C) For an 8-hour emission standard period, 6 hours of valid data; D) For a 12-hour emission standard period, 9 hours of valid data, and E) For a 24-hour emission standard period, 18 hours of valid data.	As specified by regulation	Env-A 808.14 and 805.09 (old)
55.	Facility wide	Inventories of Regulated Substances	PSNH shall monitor the quantity of regulated substances to ensure that facility is in compliance with the requirements of 40 CFR 68.	Continuously	40 CFR 68 and 1990 CAA Section 112(r)(1)

I. Recordkeeping Requirements

The Permittee is subject to the Recordkeeping requirements as contained in Table 10 below:

Table 10 – Applicable Recordkeeping Requirements ¹⁵				
Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
1.	<u>Liquid Fuel Utilization Records:</u> The Permittee shall maintain the following monthly records, or records for an alternative period as approved by DES in accordance with Env-A 912, of the liquid fuel characteristics and utilization: A) Fuel consumption (monthly and 12-month rolling average); B) Fuel type; C) Viscosity (based on generally accepted values); D) Sulfur content as percent sulfur by weight of fuel; E) BTU content per gallon of fuel; and F) Hours of operation of each fuel combustion device while operating with each type of liquid fuel, so the distribution of fuel among each combustion device can be estimated.	Monthly or an alternative period as approved by DES in accordance with Env-A 912 and for fuel consumption, monthly and 12-month rolling average	NT1, NTAB1, NTAB2, NTEG1	Env-A 901.03(a)(1) and (c) (old) and Env-A 903.03(a)(3) and (b) (new)
2.	<u>Gaseous Fuel Utilization Records:</u> The Permittee shall maintain the following monthly records, or records for an alternative period as approved by DES in accordance with Env-A 912, of the fuel characteristics and utilization: A) Fuel consumption (monthly and 12-month rolling average); B) Fuel type; C) Sulfur content as percent sulfur by weight of fuel or in grains per 100 cubic feet of fuel (as tested upon request by DES and/or EPA); D) Hours of operation of each fuel combustion device while operating with each type of gaseous fuel, so the distribution of fuel among each combustion device can be estimated.	Monthly or an alternative period as approved by DES in accordance with Env-A 912 and for fuel consumption, monthly and 12-month rolling average	NT1, NTAB1, NTAB2	Env-A 903.03(a)(4) (new)
3.	<u>Monitoring Plan and QA/QC Plan:</u> A) The Permittee shall prepare and maintain a monitoring plan for the CEMS and COMS,	Whenever a change occurs that could affect monitoring	NT1	40 CFR 75.53 (a), (b), (e), and (f) and Env-A 808.06 and

¹⁵ On April 23, 1999 DES promulgated new Env-A 900 rules to streamline the recordkeeping and reporting requirement sections of the New Hampshire Code of Administrative Rules. Until such time that the new Env-A 900 rules are approved and adopted into the State Implementation Plan (SIP) by EPA, all Title V permits will be incorporating the old Env-A 900 rules (which became effective on November 11, 1992), unless the new Env-A 900 rules are more stringent. These recordkeeping and reporting requirements shall fall under the Permit Shield provisions as contained in Section XIII of this permit.

Table 10 – Applicable Recordkeeping Requirements¹⁵

Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
	<p>which contains sufficient information to demonstrate that all unit SO₂ emissions, NO_x emissions, CO₂ emissions and opacity are monitored and reported.</p> <p>B) The Permittee shall prepare and maintain monitoring plans for other approved monitoring methods, which contain sufficient information to demonstrate that all unit NO_x emissions are monitored and reported.</p> <p>C) The Permittee shall update the monitoring plan whenever the Permittee makes a replacement, modification or change that could affect the CEMS or COMS or other approved monitoring method.</p> <p>D) The Permittee shall review the QA/QC plan and all data generated by its implementation at least once each year.</p> <p>E) The Permittee shall revise or update the QA/QC plan, as necessary, based on the results of the annual review by conducting the following:</p> <ol style="list-style-type: none"> 1) Documenting any changes made to the CEM or the monitoring method or changes to any information provided in the monitoring plan; 2) Including a schedule of, and describing, all maintenance activities that are required by the CEM manufacturer or that might have an effect on the operation of the system; 3) Describing how the audits and testing required by this part will be performed; and 4) Including examples of the reports that will be used to document the audits and tests required by this part; 5) Make the revised QA/QC plan available for on-site review by the division at any time; and 6) Within 30 days of completion of the annual QA/QC plan review, certify in writing that the owner or operator will continue to implement the source's existing QA/QC plan or submit in writing any changes to the plan and the reasons for each change. <p>F) The QA/QC plan shall be considered an update to the CEM monitoring plan</p>	method or annually, whichever is more frequent		3212.13 and 2910.09

Table 10 – Applicable Recordkeeping Requirements¹⁵

Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
	required by Env-A 808.04. G) Pursuant to Env-A 3212.13(a) and Env-A 2910.09, the unit subject to acid rain emission limitations (NT1) shall comply with the requirements of 40 CFR 75.62, except the monitoring plan shall also include all of the information required by 40 CFR 75, Subpart H.			
4.	<u>CEM, COMS and Other Approved Monitoring Methods Recordkeeping Requirements:</u> A) The Permittee shall record and maintain the information required pursuant to 40 CFR 75.57, 75.58, 75.59, and 75.73(b), which includes the certification, quality assurance, and quality control records. B) The Permittee shall record and maintain CEMS and COMS records according to the most stringent requirements of Env-A 808 and 40 CFR 75.	As specified by regulation	NT1	40 CFR 75.57, 75.58, 75.59, and 75.73 and Env-A 3212 and Env-A 903.04 (a) (new) and Env-A 800 and 40 CFR 75
5.	<u>General NOx Recordkeeping Requirements:</u> The Permittee shall record and maintain the following information for fuel burning devices: A) Facility information, including the following: 1) Source name; 2) Source identification; 3) Physical address; and 4) Mailing address. B) Identification of fuel burning devices; C) Operating schedule for each fuel burning device identified in Condition B) above: 1) Days per calendar week during the normal operating schedule; 2) Hours per day during the normal operating schedule and for a typical ozone season day; and 3) Hours per year during the normal operating schedule. D) Type and amount of fuel burned for each fuel-burning device during normal operating conditions and for a typical ozone season day, if different from normal operating conditions, on an hourly basis in mmBtu/hr. E) Theoretical potential NOx emissions for the calculation year for each fuel burning device: 1) Annual emissions, in tons per year; and 2) Typical ozone season day emissions, in	Annually and as applicable	NT1, NTAB1, NTAB2, NTEG1	Env-A 901.08 (c) (1)–(5) (old) and Env-A 905.02 (new)

Table 10 – Applicable Recordkeeping Requirements¹⁵

Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
	<p>pounds per day.</p> <p>F) Actual NOx emissions for each fuel burning device:</p> <ol style="list-style-type: none"> 1) Annual emissions, in tons per year; and 2) Typical ozone season day emissions, in pounds per day. <p>G) Emission factors and the origin of the emission factors used to calculate the NOx emissions.</p>			
6.	<p><u>Sulfur Analysis Records for Fuel Oil:</u> PSNH shall maintain delivery tickets from each fuel oil supplier for each shipment of fuel oil received. The delivery tickets shall be in a form suitable for inspection and available to the DES and/or EPA upon request. Each delivery ticket shall indicate the following:</p> <ol style="list-style-type: none"> A) The name of the fuel supplier; B) The address of the fuel supplier; C) The telephone number of the fuel supplier; D) The type of fuel delivered; E) The quantity of fuel oil delivered; F) The date of delivery; and G) The maximum percent sulfur by weight of the fuel oil delivered. <p>If the delivery tickets do not contain sulfur content of fuel delivered, the Permittee shall provide other documentation from the fuel supplier with the above information or perform testing in accordance with appropriate ASTM test methods to determine compliance with the sulfur content limitation provisions in Env-A 1604 for liquid fuels.</p>	For each delivery of fuel oil	NT1, NTAB1, NTAB2, NTEG1	Env-A 806.05 (new) and 40 CFR 70.6(a)(3)
7.	<p><u>Delivery Ticket for Propane:</u> PSNH shall maintain delivery tickets from each propane supplier for each shipment of propane received. The delivery tickets shall be in a form suitable for inspection and available to the DES and/or EPA upon request. Each delivery ticket shall indicate the following:</p> <ol style="list-style-type: none"> A) The name of the fuel supplier; B) The address of the fuel supplier; C) The telephone number of the fuel supplier; D) The type of fuel delivered; E) The quantity of propane delivered; F) The date of delivery. 	For each delivery of propane	NTAB1, NTAB2	Env-A 806.05 (new) and 40 CFR 70.6(a)(3)
8.	<p><u>Natural Gas Utilization Records:</u> PSNH shall maintain billing tickets for each natural gas supplier. The billing tickets shall be in a form</p>	Monthly	NT1	State Permit to Operate No. PO-B-1030

Table 10 – Applicable Recordkeeping Requirements¹⁵

Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
	suitable for inspection and available to the DES and/or EPA upon request. Each billing ticket shall indicate the following: A) The name of the fuel supplier; B) The address of the fuel supplier; C) The telephone number of the fuel supplier; and D) The quantity of natural gas used.			
9.	<u>Emergency Generator Operating Records:</u> PSNH shall record and maintain monthly and annual records of the operating hours of the emergency generator.	Monthly	NTEG1	TP-B-0536
10.	<u>Auxiliary Boiler Operating Records:</u> PSNH shall record and maintain monthly and consecutive 12-month records of the operating hours of each auxiliary boiler	Monthly	NTAB1, NTAB2	State Permit to Operate No. PO-B-1031 and PO-B-1032
11.	<u>Multipollutant Budget and Trading Program Recordkeeping Requirements:</u> PSNH shall comply with the recordkeeping requirements of the multipollutant budget and trading program.	As required by RSA 125-O and Env-A 2900	NT1	Env-A 2900
12.	<u>Certificate of Representation:</u> The Permittee shall complete and retain a certificate of representation for a designated representative or an alternate designated representative including the elements pursuant to 40 CFR 72.24, <i>Certificate of representation</i> .	Maintain at the facility at all times	NT1	40 CFR 72.24
13.	<u>Record Retention:</u> The Permittee shall retain the records required by this permit on file for a minimum of 5 years except the certificate of representation for the designated representatives shall be kept beyond the 5-year period. ¹⁶	Retain for a minimum of 5 years or as specified	Facility wide	Env-A 902.01 (a) (new), Env-A 3213, 40 CFR 70.6 (a)(3)(ii)(B), and 40 CFR 72.9 (f)
14.	<u>Regulated Toxic Air Pollutant Records:</u> The Permittee shall maintain records in accordance with the applicable method used to demonstrate compliance pursuant to Env-A 1405.	Maintain at facility at all times	All devices subject to RSA 125-I and Env-A 1400	Env-A 902.01 (c) (new) State Enforceable Only
15.	<u>Representative Actual Annual Emissions Test Recordkeeping Requirements:</u> PSNH shall maintain records of SO ₂ , NO _x , CO, PM, and VOCs emissions in tons/month and tons per consecutive 12-month period for NT1.	Monthly	NT1	40 CFR 52.21(b)(21) and (33), dated July 1, 2002 and 40 CFR 70.6(a)(3)(ii) and Env-A 906
16.	<u>Monitoring Records:</u> The Permittee shall maintain records of monitoring results as specified in Table 9 of this Permit including the	Maintain as required in Table 9	As specified for each monitoring record	40 CFR 70.6(a)(3)(ii)

¹⁶ Note that record retention for five years is more stringent than the three year record retention required in some sections of 40 CFR 75.

Table 10 – Applicable Recordkeeping Requirements¹⁵

Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
	<p>following:</p> <p>A) Visible emission/opacity test results for NT1, NTAB1, NTAB2, and NTEG;</p> <p>B) NO_x, SO₂, CO₂, continuous emissions monitoring data for NT1;</p> <p>C) Stack volumetric flow rate for NT1;</p> <p>D) Heat input rate for NT1;</p> <p>E) PM emissions (in lb/MMBtu over a 24-hour calendar day, tons per 12-month period) for NT1, NTAB1, and NTAB2;</p> <p>F) Toner usage in tons/day for NT1;</p> <p>G) Voltage of the transformer rectifier sets (TR Sets) for NT1-PC1;</p> <p>H) Temperature of flue gas at the outlet of the boiler (in degrees F) for NT-PC1;</p> <p>I) Current to ESP for NT1-PC1;</p> <p>J) Spark Rate in ESP for NT1-PC1;</p> <p>K) Fields out of service in ESP for NT1-PC1;</p> <p>L) Hours of operation of the flyash reinjection system for NT1;</p> <p>M) NO_x, SO₂, CO, and VOC emissions for the auxiliary boilers for NTAB1 and NTAB2;</p> <p>N) Net electrical output (MWh) for NT1;</p> <p>O) Flow metering calibrations for NT1, NTAB1, and NTAB2; and</p> <p>P) Quantities of regulated substances above the thresholds established by EPA under 40 CFR 68.130 facilitywide.</p>			
17.	<p><u>Operating Scenario Records:</u> PSNH shall maintain a record of the scenarios under which it is operating. PSNH shall specify whether operation is under normal conditions or an alternative operating scenario listed in Section VII. PSNH shall specify which alternative operating scenario is in use.</p>	Whenever operation method changes from normal operation to a specific alternative operating scenario	Facility wide	40 CFR 70.6 (a)(9)
18.	<p><u>NSPS Recordkeeping Requirements for Internal Combustion Engines</u></p> <p>Maintain documentation from the engine manufacturer certifying that the engine complies with the applicable emissions standards stated in 40 CFR 60 Subpart IIII.</p>	Maintain Up-to-Date Data	NTEG1	40 CFR 60.4211 (NSPS Subpart IIII)

J. Reporting Requirements

The Permittee is subject to the federally enforceable reporting requirements identified in Table 11 below:

Table 11 – Applicable Reporting Requirements				
Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
1.	<u>NOx Reporting Requirements:</u> The Permittee shall submit reports of the NOx records kept pursuant to the Section VIII. I. Table 9, Applicable Recordkeeping Requirements.	Annually (no later than April 15 th of the following year)	NT1, NTAB1, NTAB2, NTEG1	Env-A 901.09 (old) and Env-A 909.03 (new)
2.	<u>State Acid Deposition Control Program Reporting Requirements:</u> The Permittee shall submit an annual report of the fuel utilization information pursuant to Env-A 903.03 and Section VIII. I. Table 10, Applicable Recordkeeping Requirements.	Annually (no later than April 15 th of the following year)	NT1	Env-A 907.02 (new)
3.	<u>CEMS Recertification Notifications and Reports:</u> A) The Permittee shall notify EPA and DES by telephone or in writing and not later than 21 days prior to the first scheduled day of full recertification testing and at least 7 calendar days prior to the first scheduled day of partial recertification testing (when all of the tests are not required). In emergency situations when equipment fails with lost data, the Permittee may provide notice within 2 business days following the date when testing is scheduled. If the testing is rescheduled, the Permittee may notify DES and EPA by telephone or other means within 2 business days prior to the scheduled test date or the revised test date, whichever is earlier. B) Within 45 calendar days after completing all recertification tests, the Permittee shall submit to EPA and DES the electronic and hardcopy information contained in 40 CFR 75.63. C) Pursuant to Env-A 3212.14 and Env-A 2910.10, PSNH shall submit an application to DES within 45 days after completing all initial certification or recertification tests including the information required under 40 CFR 75, Subpart H. D) Pursuant to Env-A 2910.07, PSNH shall also submit written notification required pursuant to 40 CFR 75.61 to the ATS administrator.	7 days prior to partial recertification, 21 days prior to full recertification, and 45 days after all recertification tests	NT1	40 CFR 75.61 (a)(1), 75.70, 75.63, and 75.73(d) and Env-A 3212 and 2910
4.	<u>Relative Accuracy Test Audit (RATA)</u>	21 calendar days	NT1	40 CFR 75.61

Table 11 – Applicable Reporting Requirements

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	<u>Notification and Reports:</u> A) The Permittee shall submit written notice to EPA and DES no later than 21 calendar days prior to the first scheduled day of testing. ¹⁷ If the testing is rescheduled, the Permittee may notify DES and EPA by telephone or other means no later than 24-hours in advance of the new testing date. DES shall require rescheduling of the RATA if staff necessary to observe the RATA are not available. B) If requested, the Permittee shall submit the quality assurance RATA reports to EPA and DES by the later of 45 days after completing a quality assurance RATA or 15 days of receiving the request. C) Pursuant to Env-A 808.07(b), PSNH shall submit to DES a written report summarizing the testing within 30 days of the completion of the test. D) Pursuant to Env-A 2910.07, PSNH shall also submit written notification required pursuant to 40 CFR 75.61 to the ATS administrator.	prior to RATA		(a)(5) and 75.73(d) and Env-A 3212.11 and 2910 and 808.05 and 808.07(c) and (d)
5.	<u>Performance Specification Testing Reports:</u> A) DES shall be notified of the date or dates of the performance specification testing at least 30 days prior to the scheduled dates. B) PSNH shall submit to DES a written report summarizing the testing within 30 days of the completion of the test.	30-day notice to DES prior to test; test report to DES 30 days after the test	NT1	Env-A 808.05
6.	<u>General Audit Notification Requirements:</u> PSNH shall notify DES at least 2 weeks prior to any planned audit or test procedure except for RATAs, where PSNH shall provide at least 30 days notice prior to the performance of the RATA.	2 weeks prior to any planned audit or test procedure and at least 30 days prior to the RATA.	NT1	Env-A 808.07(c) and (e)
7.	<u>Monitoring and QA/QC Plan Submittals:</u> The Permittee shall submit to EPA and DES a complete, electronic, up-to-date monitoring plan at the time of recertification application submission and in each electronic quarterly report, and whenever an update of the electronic monitoring plan information is required.	In the recertification application, in each electronic quarterly report, and whenever an update of the electronic monitoring plan information is required	NT1	40 CFR 75.62 and 75.73(d) and (e) and Env-A 808.04, 808.06, 3212 and 2910
8.	<u>Quarterly Reports:</u> A) The Permittee shall submit to DES and EPA in	30 calendar days after the end of the	NT1	40 CFR 75.64, 40 CFR 75.73(f), 40

¹⁷ Note that pursuant to Env-A 808.07, PSNH shall notify DES at least 30 days prior to the performance of the RATA. This requirement is less stringent than the requirement of 40 CFR 75.

Table 11 – Applicable Reporting Requirements

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	<p>electronic format or other format as approved by DES and/or EPA 30 calendar days after the end of the calendar quarter the information contained in 40 CFR 75.64(a), 40 CFR 75.73(f), 40 CFR 75.74, Env-A 2912, Env-A 3212, Env-A 3214, Env-A 808.11(new), and Env-A 808.13 (new) and the following information:</p> <ol style="list-style-type: none"> 1) Written report of opacity, SO₂, NO_x, and CO₂ emissions as calculated by the CEMS. 2) The 24-hour averages of the following shall be reported, whether or not an excess emission has occurred: <ol style="list-style-type: none"> a. SO₂ lb/MMBtu, SO₂ ppm, and SO₂ lb/hr; b. NO_x lb/MMBtu, NO_x ppm, and NO_x lb/hr; c. Percent CO₂ and CO₂ lb/hr as measured by continuous monitor/recorder; d. Stack volumetric flowrate (in kscfm); e. Load (in MW); f. Steam flow (in klbs/hr); g. Heat input (MMBtu/hr); and h. Opacity (in percent). 3) Excess emission data recorded by the CEM system, including the following: <ol style="list-style-type: none"> a. The date and time of the beginning and ending of each of excess emissions; b. The magnitude of each excess emission; c. The specific cause of the excess emission; and d. The corrective action taken. 4) If no excess emissions have occurred, a statement to that effect; 5) For gaseous emission monitoring systems, the daily averages of the measurements made and emissions rates calculated. 6) A statement as to whether the CEM system was inoperative, repaired, or adjusted during the reporting period; 7) If the CEM system was inoperative, repaired, or adjusted during the reporting period, the following information: <ol style="list-style-type: none"> a. The date and time of the beginning and ending of each period when the 	calendar quarter		<p>CFR 75.57(f), 40 CFR 75.74, Env-A 2910, Env-A 2911, Env-A 3212, Env-A 3214, Env-A 808.11(new), Env-A 808.13 (new), and State Permit to Operate No. PO-B-1030</p>

Table 11 – Applicable Reporting Requirements

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	<p>CEM was inoperative;</p> <p>b. The reason why the CEM was not operating;</p> <p>c. The corrective action taken; and</p> <p>d. The percent data availability calculated in accordance with Env-A 808.10 for each flow, diluent, or pollutant analyzer in the CEM system;</p> <p>8) The date and time beginning and ending each period when the source of emissions which the CEM system is monitoring was not operating;</p> <p>9) When calibration gas is used, the following information:</p> <p>a. The calibration gas concentration;</p> <p>b. If a gas bottle was changed during the quarter:</p> <p>i) The date of the calibration gas bottle change;</p> <p>ii) The gas bottle concentration before the change; and</p> <p>iii) The gas bottle concentration after the change; and</p> <p>c. The expiration date for all calibration gas bottles used.</p> <p>10) Excess emissions of SO₂ shall be defined as an annual SO₂ emission, which exceeds the state acid rain emission limitation, as calculated from CEM data.</p> <p>B) The designated representative shall affirm that the component/system identification codes and formulas in the quarterly electronic reports represent current operating conditions.</p> <p>C) The designated representative shall submit a certification in support of each quarterly emissions monitoring report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored.</p> <p>D) The certification shall indicate whether the monitoring data submitted were recorded in accordance with the applicable requirements of this part including the quality control and quality assurance procedures and specifications of 40 CFR 75, and any such requirements, procedures and specifications of an applicable excepted or approved alternative monitoring method.</p>			

Table 11 – Applicable Reporting Requirements

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	<p>E) For a unit with add-on emission controls, the designated representative shall also include a certification, for all hours where data are substituted following the provisions of 40 CFR 75.34(a)(1), that the add-on emission controls were operating within the range of parameters listed in the monitoring plan and that the substitute values recorded during the quarter do not systematically underestimate SO₂ or NO_x emissions, pursuant to 40 CFR 75.34.</p> <p>F) For a unit that is reporting on a control period basis, the designated representative shall also include a certification that the NO_x emission rate and NO_x concentration values substituted for missing data under 40 CFR 75 Subpart D are calculated using only values from a control period and do not systematically underestimate NO_x emissions.</p> <p>G) Pursuant to Env-A 3212.15(e) and Env-A 2910.11(a)(3), the quarterly reports shall be submitted in the manner specified in 40 CFR 75, Subpart H and 40 CFR 75.64.</p> <p>H) Pursuant to Env-A 3212.15(f) and Env-A 2910.11(a)(4), for NT1 the quarterly reports shall include all of the data and information required in 40 CFR Subpart H and 40 CFR Subpart G.</p> <p>I) Pursuant to Env-A 3214.01 and Env-A 2911.01, PSNH shall also submit emissions and operations information in electronic format as part of the quarterly reports.</p> <p>J) Pursuant to Env-A 3214.02, PSNH shall also submit to the NETS administrator in the quarterly reports, NO_x emissions in lb/hr for every hour during the control period and cumulative quarterly and seasonal NO_x emission data in pounds.</p> <p>K) Pursuant to Env-A 2911.02, PSNH shall also submit to the ETS administrator in the quarterly reports, SO₂, NO_x and CO₂ emissions in lb/hr for every hour during the year and cumulative quarterly and annual SO₂, NO_x and CO₂ emissions data in pounds.</p>			
9.	<u>Offset Plans for Excess SO₂ Emissions:</u> The Permittee shall submit an offset plan no later than 60 days after the end of any calendar year during which a unit has excess SO ₂ emissions. The offset plan shall contain the information pursuant to 40	60 days after the end of any calendar year	NT1	40 CFR 77.3

Table 11 – Applicable Reporting Requirements

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	CFR 77.3.			
10.	<u>Quarterly Audit Reports:</u> Pursuant to Env-A 808.07 (new), the Permittee shall submit to DES, a written summary report of the results of all required audits that were performed in that quarter, in accordance with the following: A) For gaseous CEM audits, the report format shall conform to that presented in 40 CFR 60, Appendix F, Procedure 1, Section 7; and B) For opacity CEM audits, the report format shall conform to that presented in EPA-600/8-87-025, April 1992, “Technical Assistance Document: Performance Audit Procedures for Opacity Monitors.”	Quarterly, no later than 30 calendar days after the end of the quarter for which reporting is required	NT1	Env-A 808.07 (new)
11.	<u>Quarterly Fuel Data Reports:</u> The Permittee shall submit the fuel data listed in Table 10 above summarized on a monthly basis and for the previous 3 quarters in addition to the current reporting quarter. The Permittee shall submit monthly fuel usage information, including fuel type and the sulfur content by device.	Quarterly, no later than 30 calendar days after the end of the quarter for which reporting is required	NT1, NTAB1, NTAB2	Env-A 910 and State Permits to Operate Nos. PO-B-1030, PO-B-1031, and PO-B-1032
12.	<u>Annual Fuel Data Reports:</u> The Permittee shall submit quarterly fuel usage information for the emergency generator on a calendar year basis.	Annually (no later than April 15 th of the following year)	NTEG1	Env-A 910
13.	<u>Performance Test Reports:</u> The Permittee shall submit a report to DES documenting the results of the compliance stack emission test. The compliance stack emission test report shall contain the following information: A) All the information required for the pre-test protocol as described in Env-A 802.04; B) All test data; C) All calibration data; D) Process data agreed by DES and the Permittee to be collected; E) All test results; F) A description of any discrepancies or problems that occurred during testing or sample analysis; G) An explanation of how discrepancies or problems were treated and their effect on the final results; and H) A list and description of all equations used in the test report, including sample calculations for each equation used.	No later than 60 days after a performance test	Facility wide	Env-A 802.11 (new)
14.	<u>Net Electrical Output Reporting</u> – The Permittee shall report monthly data ¹⁸ of the net electrical	Annually (no later than April 15 th of	NT1	Env-A 2906.05(g) and

¹⁸ Copies of the Forms EIA-906 and EIA-920 are sufficient.

Table 11 – Applicable Reporting Requirements

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	output of each affected source for the calendar year and the ozone season to DES.	the following year)		3207.04(k)
15.	<u>Regulated Toxic Air Pollutant Reports:</u> The Permittee shall report actual emissions speciated by individual regulated toxic air pollutants, including a breakdown of VOC emission compounds.	Annually (no later than April 15 th of the following year)	Facility wide	Env-A 907.01 (new) State Enforceable Only
16.	<u>Representative Actual Annual Emissions Test Emissions Reporting Requirements:</u> PSNH shall submit to DES annually SO ₂ , NO _x , CO, PM, and VOCs emissions in tons/month and consecutive 12-month period for NT1.	Annually (no later than April 15 th of the following year)	NT1	40 CFR 52.21(b)(21) and (33), dated July 1, 2002 and Env-A 910 (new)
17.	<u>Semi-Annual Permit Deviation/Monitoring Reports:</u> The Permittee shall submit a permit deviation/monitoring report of the data specified in Table 9 of this Permit every 6 months. All required reports must be certified by a responsible official consistent with 40 CFR 70.5(d). The report shall contain a summary of the following information, unless this information was provided (or will be provided) to DES pursuant to another requirement: A) Visible emission/opacity test results for NT1, NTAB1, NTAB2, and NTEG; B) Summary showing monthly average sulfur content of the liquid and gaseous fuels from testing and/or delivery ticket and/or other documentation certifications for liquid and gaseous fuel sulfur content for NT1, NTAB1, and NTAB2; C) NO _x , SO ₂ , CO ₂ , continuous emissions monitoring data for NT1; D) PM emissions (in lb/MMBtu over a 24-hour calendar day, tons per 12-month period) for NT1, NTAB1, and NTAB2; E) Toner usage in tons/day and an indication of the combustion of any new toners for NT1; F) Hours of operation without the flyash reinjection system for NT1; G) NO _x , SO ₂ , CO, and VOC emissions for the auxiliary boilers (NTAB1, NTAB2) and emergency generator (NTEG); H) Net electrical output (MWh) for NT1; I) Operating hours for the emergency generator (NTEG); and J) All instances of deviations from Permit requirements.	Semiannually (by July 31 st and January 31 st of each calendar year)	Facility wide	40 CFR 70.6(a)(3)(iii)(A) and Env-A 911.05
18.	<u>Notification of Removal of Overfire Air:</u> PSNH shall notify DES in writing within 30 calendar	Within 30 calendar days of removal	NT1	Env-A 910 (new)

Table 11 – Applicable Reporting Requirements				
Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	days of removing the overfire air capabilities.			
19.	<u>Prompt Reporting of Permit Deviations:</u> The Permittee shall promptly report deviations from permit requirements by phone, fax or e-mail in accordance with Section XXVIII of this permit and Env-A 911 (new).	Within 24 hours of discovery of occurrence	Facility wide	Env-A 911 (new) and 40 CFR 70.6 (a)(3)(iii)(B)
20.	<u>Certification by a Responsible Official:</u> Any report or compliance certification submitted to the DES and/or EPA shall contain certification by a responsible official of truth, accuracy, and completeness as outlined in Section XXI.B of this permit.	With each submittal	Facility wide	40 CFR 70.5 (d)
21.	<u>Certification by the Designated Representative or the Alternate Designated Representative:</u> Any document submitted under the Acid Rain program shall be signed and certified by the designated representative or the alternate designated representative and include the statements pursuant to 40 CFR 72.21 (a)(1) and (2).	With each submittal	NT1	40 CFR 72.21
22.	<u>Emissions Reporting and Emissions Fees:</u> The Permittee shall submit reports of actual emissions of all significant and insignificant activities and payment of emission-based fees in accordance with Env-A 700 and Section XXIII of this permit.	Quarterly payment on the 15 th day of the 2 nd quarter after actual emissions occurred; Reporting annually by April 15 th of the following year	Facility wide	Env-907.01 (new) and Env-A 705.03 and 705.04
23.	<u>Annual Acid Rain Compliance Certification Report:</u> The Permittee shall submit an annual compliance certification report containing all the information required in 40 CFR 72.90(b)	Annually, within 60 days after the end of the calendar year	NT1	40 CFR 72.90
24.	<u>Multipollutant Budget and Trading Program Annual Compliance Certification:</u> The Permittee shall submit an annual compliance certification for the prior year containing the information listed in Env-A 2913.	By January 30 of each year, beginning in 2007	NT1	Env-A 2913
25.	<u>NOx Budget Program Compliance Certification:</u> For each control period (May 1 to September 30 of each year), the Permittee shall submit an annual compliance certification containing the information listed in Env-A 3216.	By November 30 of each year	NT1	Env-A 3216
26.	<u>Annual Title V Compliance Certification:</u> The Permittee shall submit an annual compliance certification in accordance with Section XXI of this permit.	Annually (no later than April 15 th of the following year)	Facility wide	40 CFR 70.6(c)(1)

IX. Requirements Currently Not Applicable

The Permittee did not identify any requirements that are not applicable to the facility.

General Title V Operating Permit Conditions

X. Issuance of a Title V Operating Permit

This Permit is issued in accordance with the provisions of Part Env-A 609. In accordance with 40 CFR 70.6(a)(2), this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date five (5) years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the Permittee's emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

XI. Title V Operating Permit Renewal Procedures

Pursuant to Env-A 609.07(b), an application for renewal of this Permit shall be considered timely if it is submitted to the Director at least six months prior to the designated expiration date of this Permit.

XII. Application Shield

Pursuant to Env-A 609.08, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of this part until the Director takes final action on the application.

XIII. Permit Shield

A. Pursuant to Env-A 609.09(a), a permit shield shall provide that:

1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and
2. For any potential applicable requirement or any potential state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically identified in this Title V Operating Permit Section IX as not applicable to the stationary source or area source, the Permittee need not comply with the specifically identified federal or state requirements.

B. The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.09(b). It shall not apply to certain conditions as specified in Env-A 609.09(c) that may be incorporated into this Permit following permit issuance by DES.

- C. If a Title V Operating Permit and amendments thereto issued by the DES does not expressly include or exclude an applicable requirement or a state requirement found in the NH Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the Permittee shall comply with the provisions of said requirement to the extent that it applies to the Permittee.
- D. If the DES determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant or Permittee, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.
- E. Pursuant to Env-A 609.09(f), nothing contained in Section XIII of this Permit shall alter or affect the ability of the DES to reopen this Permit for cause in accordance with Env-A 609.19 or to exercise its summary abatement authority.
- F. Pursuant to Env-A 609.09(g), nothing contained in this section or in any title V operating permit issued by the DES shall alter or affect the following:
 - 1. The ability of the DES to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;
 - 2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;
 - 3. The provisions of section 303 of the CAA regarding emergency orders including the authority of the EPA Administrator under that section;
 - 4. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - 5. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA;
 - 6. The ability of the DES or the EPA Administrator to obtain information about a stationary source, area source, or device from the owner or operator pursuant to section 114 of the CAA; or
 - 7. The ability of the DES or the EPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

XIV. Reopening for Cause

The Director shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.19(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the Director shall follow the provisions specified in Env-A 609.19(b) through (g).

XV. Administrative Permit Amendments

- A. Pursuant to Env-A 612.01, the Permittee may implement the changes addressed in the request for an administrative permit amendment as defined in Part Env-A 100 immediately upon submittal of the request.
- B. Pursuant to Env-A 612.01, the Director shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

XVI. Operational Flexibility

- A. Pursuant to Env-A 612.02, the Permittee subject to and operating under this Title V Operating Permit may make changes involving trading of emissions, off-permit changes, and section 502(b)(10) changes at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all of the following conditions are met, as well as conditions specified in Section XVI. B through E of this permit, as applicable. DES has included permit terms authorizing the generation of DERs.
 - 1. The change is not a modification under any provision of Title I of the CAA;
 - 2. The change does not cause emissions to exceed the emissions allowable under the Title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;
 - 3. The owner or operator has obtained any temporary permit required by Env-A 600;
 - 4. The owner or operator has provided written notification to the director and administrator of the proposed change and such written notification includes:
 - a) The date on which each proposed change will occur or has occurred;
 - b) A description of each such change;
 - c) Any change in emissions that will result;
 - d) A request that the operational flexibility procedures be used; and
 - e) The signature of the responsible official, consistent with Env-A 605.04;
 - 5. The change does not exceed any emissions limitations established under any of the following:
 - a) The New Hampshire Code of Administrative Rules, Env-A 100-4300;

- b) The CAA; or
 - c) This Title V Operating Permit; and
6. The Permittee, DES, and EPA have attached each written notice required above to their copy of this Title V Operating Permit.
- B.** For changes involving the trading of emissions, the Permittee must also meet the following conditions:
- 1. The Title V Operating Permit issued to the stationary source or area source already contains terms and conditions including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements;
 - 2. The owner or operator has included in the application for the Title V Operating Permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes to the Title V Operating Permit which qualify under a federally- enforceable emissions cap that is established in the Title V Operating Permit independent of the otherwise applicable requirements;
 - 3. The Director has not included in the emissions trading provision any devices for which emissions are not quantifiable or for which there are no replicable procedures to enforce emissions trades; and
 - 4. The written notification required above is made at least 7 days prior to the proposed change and includes a statement as to how any change in emissions will comply with the terms and conditions of the Title V Operating Permit.
- C.** For off-permit changes, the Permittee must also meet the following conditions:
- 1. Each off-permit change meets all applicable requirements and does not violate any existing permit term or condition;
 - 2. The written notification required above is made contemporaneously with each off-permit change, except for changes that qualify as insignificant under the provisions of Env-A 609.04;
 - 3. The change is not subject to any requirements under Title IV of the CAA and the change is not a Title I modification;
 - 4. The Permittee keeps a record describing the changes made at the source which result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise

regulated under this Permit, and the emissions resulting from those changes; and

5. The written notification required above includes a list of the pollutants emitted and any applicable requirement that would apply as a result of the change.

D. For section 502(b)(10) changes, the Permittee must also meet the following conditions:

1. The written notification required above is made at least 7 days prior to the proposed change; and
2. The written notification required above includes any permit term or condition that is no longer applicable as a result of the change.

E. Pursuant to Env-A 612.02(f), the off-permit change and section 502(b)(10) change shall not qualify for the permit shield under Env-A 609.09.

XVII. Minor Permit Amendments

- A.** Pursuant to Env-A 612.05 prior to implementing a minor permit modification, the Permittee shall submit a written request to the Director in accordance with the requirements of Env-A 612.05(b).
- B.** The Director shall take final action on the minor permit amendment request in accordance with the provisions of Env-A 612.05(c) through (g).
- C.** Pursuant to Env-A 612.05(h), the permit shield specified in Env-A 609.09 shall not apply to minor permit amendments under Section XVII. of this Permit.
- D.** Pursuant to Env-A 612.05(a), the Permittee shall be subject to the provisions of RSA 125-C:15 if the change is made prior to the filing with the Director a request for a minor permit amendment.

XVIII. Significant Permit Amendments

- A.** Pursuant to Env-A 612.06, a change at the facility shall qualify as a significant permit amendment if it meets the criteria specified in Env-A 612.06(a)(1) through (5).
- B.** Prior to implementing the significant permit amendment, the Permittee shall submit a written request to the Director which includes all the information as referenced in Env-A 612.06(b) and (c) and shall be issued an amended Title V Operating Permit from the DES. The Permittee shall be subject to the provisions of RSA 125-C:15 if a request for a significant permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Title V Operating Permit.
- C.** The Director shall take final action on the significant permit amendment in accordance with the Procedures specified in Env-A 612.06(d), (e) and (f).

XIX. Title V Operating Permit Suspension, Revocation or Nullification

- A. Pursuant to RSA 125-C:13, the Director may suspend or revoke any final permit issued hereunder if, following a hearing, the Director determines that:
1. The Permittee has committed a violation of any applicable statute or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, order or permit condition in force and applicable to it; or
 2. The emissions from any device to which this Permit applies, alone or in conjunction with other sources of the same pollutants, presents an immediate danger to the public health.
- B. The Director shall nullify any Permit, if following a hearing in accordance with RSA 541-A:30, II, a finding is made that the Permit was issued in whole or in part based upon any information proven to be intentionally false or misleading.

XX. Inspection and Entry

EPA and DES personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6,VII, for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the NH Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

XXI. Certifications

A. Compliance Certification Report

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify, for the previous calendar year, that the facility is in compliance with the requirements of this permit. The report shall be submitted annually, no later than April 15th of the following year. The report shall be submitted to the DES and to the U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5), the report shall describe:

1. The terms and conditions of the Permit that are the basis of the certification;
2. The current compliance status of the source with respect to the terms and conditions of this Permit, and whether compliance was continuous or intermittent during the reporting period;
3. The methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
4. Any additional information required by the DES to determine the compliance status of the source.

B. Certification of Accuracy Statement

All documents submitted to the DES shall contain a certification of accuracy statement by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

"I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents are to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

All reports submitted to DES (except those submitted as emission based fees as outlined in Section XXIII of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services
Air Resources Division
29 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095
ATTN: Section Supervisor, Compliance Bureau

All reports submitted to EPA shall be submitted to the following address:

Office of Environmental Stewardship
Director Air Compliance Program
United States Environmental Protection Agency
1 Congress Street
Suite 1100 (SEA)
Boston, MA 02114-2023
ATTN: Air Compliance Clerk

XXII. Enforcement

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the DES and/or EPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

In accordance with 40 CFR 70.6 (a)(6)(ii) a Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

XXIII. Emission-Based Fee Requirements

- A. The Permittee shall pay an emission-based fee quarterly for this facility as calculated each calendar year pursuant to Env-A 705.03.
- B. The Permittee shall determine the total actual quarterly emissions from the facility to be included in the emission-based multiplier specified in Env-A 705.03(a) for each calendar quarter in accordance with the methods specified in Env-A 616.
- C. The Permittee shall calculate the quarterly emission-based fee for each calendar year in

$$FEE = E * DPT * CPI_m * ISF$$

accordance with the procedures specified in Env-A 705.03 and the following equation:
Where:

FEE =	The quarterly emission-based fee for each calendar quarter as specified in Env-A 705.
E =	The emission-based multiplier is based on the calculation of total quarterly emissions as specified in Env-A 705.02 and the provisions specified in Env-A 705.03(a).
DPT =	The dollar per ton fee the DES has specified in Env-A 705.03(b).
CPI _m =	The Consumer Price Index Multiplier as calculated in Env-A 705.03(c).
ISF =	The Inventory Stabilization Factor as specified in Env-A 705.03(d).

- D. The Permittee shall contact the DES each calendar year for the value of the Inventory Stabilization Factor.

- E. The Permittee shall contact the DES each calendar year for the value of the Consumer Price Index Multiplier.
- F. The Permittee shall submit, to the DES, payment of the emission-based fee and a summary of the calculations referenced in Sections XXIII.B. and C of this Permit for each calendar quarter. The total emission-based fee shall be paid in four equal installments on a quarterly basis. The quarterly payments shall be made in accordance with Env-A 705.04 on the 15th day of the following months:
1. July of the year to which the fee applies (e.g., fees for emissions occurring during January, February, March 2007 are due July 15, 2007);
 2. October of the year to which the fee applies (e.g., fees for emissions occurring during April, May, June 2007 are due on October 15, 2007);
 3. January of the following year (e.g., fees for emissions occurring during July, August, September 2007 are due on January 15, 2008);
 4. April of the following year (e.g., fees for emissions occurring during October, November, December 2007 are due on April 15, 2008).

The Permittee shall pay any remaining balance of the total emission-based fee for the year no later than April 15th of the following year.

The emission-based fee and summary of the calculations shall be submitted to the following address:

New Hampshire Department of Environmental Services
Air Resources Division
29 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095
ATTN.: Emissions Inventory

- G. The DES shall notify the Permittee of any under payments or over payments of the annual emission-based fee in accordance with Env-A 705.05.

XXIV. Duty To Provide Information

In accordance with 40 CFR 70.6 (a)(6)(v), upon the DES's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the DES copies of records that the Permittee is required to retain by this Permit. The Permittee may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Part Env-A 103 at the time such information is submitted to DES. DES shall evaluate such requests in accordance with the provisions of Part Env-A 103.

XXV. Property Rights

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort, or any exclusive privilege.

XXVI. Severability Clause

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

XXVII. Emergency Conditions

Pursuant to 40 CFR 70.6 (g), the Permittee shall be shielded from enforcement action brought for noncompliance with technology based¹⁹ emission limitations specified in this Permit as a result of an emergency²⁰. In order to use emergency as an affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- B. The permitted facility was at the time being properly operated;
- C. During the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and
- D. The Permittee submitted notice of the emergency to the DES within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

¹⁹ Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

²⁰ An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

XXVIII. Permit Deviation

In accordance with 40 CFR 70.6(a)(3)(iii)(B), the Permittee shall report to the DES all instances of deviations from Permit requirements, by telephone, fax, or e-mail (pdeviations@des.state.nh.us) within 24 hours of discovery of such deviation. This report shall include the deviation itself, including those attributable to upset conditions as defined in this Permit, the probable cause of such deviations, and any corrective actions or preventative measures taken.

Within 10 days of discovery of the permit deviation, the Permittee shall submit a written report including the above information as well as the following: preventive measures taken to prevent future occurrences; date and time the permitted device returned to normal operation; specific device, process or air pollution control equipment that contributed to the permit deviation; type and quantity of excess emissions emitted to the atmosphere due to permit deviation; and an explanation of the calculation or estimation used to quantify excess emissions.

Said Permit deviation shall also be submitted in writing to the DES in the semi-annual summary report of monitoring and testing requirements due July 31st and January 31st of each calendar year. Deviations are instances where any Permit condition is violated and has not already been reported as an emergency pursuant to Section XXVII of this Permit.

Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance.

Federal Acid Rain Requirements

XXIX. Phase II Acid Rain Permit Application

The attached Phase II Acid Rain Permit application, dated January 12, 2004, is hereby incorporated by reference into this permit. The Permittee shall comply with the requirements set forth in the Phase II Acid Rain Permit Application and this permit.

XXX. General Acid Rain Provisions

The Permittee shall comply with the applicable provisions of 40 CFR 72, *Permit Regulations*; 40 CFR 73, *Sulfur Dioxide Allowance System*; 40 CFR 75, *Continuous Emission Monitoring*; and 40 CFR 77, *Excess Emissions*.